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MIDDLE EASTERN STRATEGIC DEPLOYMENT—  
OASIS OR MIRAGE?

A thesis presented to the Faculty of the U.S. Army  
Command and General Staff College in partial  
fulfillment of the requirements for the  
degree

MASTER OF MILITARY ART AND SCIENCE

by

STEPHEN BROOKS HOWARD, MAJ, USA  
B.S., Trinity University, 1973  
M.S.B.A., Boston University, 1977

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The study concludes that the United States is not capable of successfully deploying its combat forces to the Middle East within the time schedules contained in our current contingency plans. This lack of force projection capability is attributed to delays which will be encountered because of unanticipated transportation-related problems. This study cites a weakness in the structure of Army and Joint Commands at Division level and above. The weakness, as identified, shows that the contingency planning function is separated from contingency execution/operations functions within these command structures.

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MASTER OF MILITARY ART AND SCIENCE

THESIS APPROVAL PAGE

Name of Candidate: Major Stephen B. Howard

Title of Thesis: Middle Eastern Strategic Deployment—  
Oasis or Mirage?

Approved by:

Theodore M. Shadid, Thesis Committee Chairman  
MAJ (P) Theodore M. Shadid, MPA

William Fritchley, Member, Graduate Faculty  
LTC William Fritchley, MS

Philip W. Dyer, Member, Consulting Faculty  
COL Philip W. Dyer, Ph.D.

Accepted this 6th day of June 1986 by:

Philip J. Brookes, Director, Graduate Degree  
Philip J. Brookes, Ph.D. Programs

The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

## ABSTRACT

MIDDLE EASTERN STRATEGIC DEPLOYMENT--OASIS OR MIRAGE? By Major Stephen B. Howard, USA, 145 pages.

This study assesses the feasibility of the United States deploying its planned military forces for the protection of its national interests in the Middle East, within time constraints previously established in our Southwest Asian contingency plans. The actual deployment feasibility was determined based upon comparisons of historical and current-day, transportation-related problems, which have been encountered during actual and exercise-related strategic military deployments. Past deployments by the United States to Europe in 1944 (Normandy Invasion), to Lebanon in 1958, to Grenada in 1983, and by the United Kingdom to the Falkland Islands in 1982, as well as recent Joint Readiness Exercises, were analyzed. Thus, common transportation-related problems served to identify the general causes for delays in the smooth movement of American military forces.

This study identified three consistent causes of delays in strategic deployments: (1) Lack of adequate deployment training, (2) Inadequate coordination of operational requirements, and (3) Failure to execute specific details in pre-established contingency plans and procedures.

The study concludes that the United States is not capable of successfully deploying its combat forces to the Middle East within the time schedules contained in our current contingency plans. This lack of force projection capability is attributed to delays which will be encountered because of unanticipated transportation-related problems. This study cites a weakness in the structure of Army and Joint Commands at Division level and above. The weakness, as identified, shows that the contingency planning function is separated from contingency execution/operations functions within these command structures.

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## CHAPTER ONE

### INTRODUCTION

#### BACKGROUND--

The Middle East has been, and currently is, an extremely volatile area of the world. "Southwest Asia," as it is referred to by many contingency planners, is a strategically important area of interest for the United States and the rest of the Western World, as well as for the Soviet Union and other Eastern-bloc nations. The area's importance is based primarily upon the large amounts of petroleum exported to the East and West each year. The reasons for the Middle East being such a volatile region are very complex; they are of political, economic, religious and national causes. Recent civil war in Lebanon and conflict between Iraq and Iran, in addition to the Soviet invasion of Afghanistan, clearly illustrate the instability of the entire Southwest Asian region. Consequently, this area of the world is of vital interest to U.S. military planners, because of our potential involvement there, due to the instability of the region and in order to protect our numerous national interests.

The United States is concerned with two primary national interests in this area:

- 1) Protection of oil production and petroleum sales to the West, and
- 2) Denial of access to this strategically-vital area by the Soviet Union and other Eastern-bloc nations.

Protection of our interests would be accomplished through the projection of American combat power to the Middle East. Currently, the United States does not have permanent military bases in this Middle Eastern region. Thus, if our military power is to be utilized in this key location, forces will have to be deployed rapidly from other American bases around the world. There are detailed deployment plans already in existence for our Southwest Asian contingencies. However, due to transportation-related operational problems, it is questionable whether sufficient personnel, equipment, and accompanying supplies can be deployed within the time required to achieve our desired military objectives. Transportation-related operational problems are those problems which are encountered during the loading or unloading of airlift and/or sealift assets. These types of problems are often the result of either inadequate planning or the failure to follow established transportation procedures. Documentation and marking errors, poor load plans, cargo sorting problems, and incorrect sequencing of units and their equipment to ports of embarkation (POE) are all examples of transportation-related operational problems.

These transportation-related problems have plagued military

deployments for many years. British Lieutenant Colonel George Armand Furse noted that:

"In a subject of such a complicated and difficult nature, it appears almost incredible that, with the many expeditions by sea in which we have already engaged, no steps should have been taken up to the present to prepare a detailed code of action to serve as a guide (as far as circumstances will admit) for the efficient performance of the work (deployment). To this want may be attributed much of the unsatisfactory results generally attending such operations, which give rise to a great outcry, charges preferred that we have neglected to profit by the errors of the past."<sup>1</sup>

Furse made this observation in 1883 while studying problems that the United Kingdom encountered during their deployment to Egypt in 1882. The United States is still guilty of not learning from the errors of the past. Some of the transportation-related problems that Furse identified still occur in modern-day deployments. These problems are as follows:

- (1) Deploying units did not project accurate tonnages for the equipment and accompanying supplies.<sup>2</sup>
- (2) Cargo ships were not loaded according to the priority in which the deploying units wished to offload their supplies and equipment.<sup>3</sup>
- (3) High-ranking officers and senior government officials tended to disrupt the deployment operations when they visited the ports of embarkation.<sup>4</sup>
- (4) There was a general lack of detailed plans (SOPs) to guide

the deploying units in proper deployment operations.5

This study identifies, compares, concludes, and speculates as to the likely impact of these and similar transportation-related problems which have been encountered in more recent times by deploying combat forces. Also, my research pin-points a need for more extensive studies and more specifically-detailed deployment plans to ensure that an American strategic deployment to the Middle East is, indeed, an achievable plan (an "Oasis"), rather than simply an unrealistic dream (a "Mirage").

#### PURPOSE--

This study's purpose is to assess the feasibility of the United States deploying its planned military forces for the protection of its national interests in the Middle East, within the time constraints contained in our Southwest Asian contingency plans, should the need arise. The feasibility will be determined based upon conclusions drawn from a comparison of historical and current-day transportation-related problems, which have been encountered during the execution of actual and exercise-related strategic military deployments.

#### DELIMITATIONS--

To limit the scope of research, this study will not address

whether or not sufficient sealift and airlift assets are available to support, in full, a major military deployment into Southwest Asia. It is likely that if we conducted a strategic deployment today we would only have about fifty percent strategic airlift and approximately eighty percent of the strategic sealift capability required in order to project enough military power into the Middle East to achieve our objectives. The strategic airlift requirements were determined by the Congressionally Mandated Mobility Study (CMMS) in 1981. The study established an airlift goal of sixty-six million ton-miles per day which would enable the Air Force to move the equivalent of sixty tactical fighter squadrons, one amphibious brigade, and six Army divisions to the Middle East within ten days. The strategic sealift goal was set at eight hundred thousand short-tons per day. This goal was established to meet what the Navy considered to be its worst-case scenario for a simultaneous Middle East and NATO contingency. Each of the armed services has also conducted in-depth studies to assess our capability to deploy U.S. forces to Southwest Asia. And each has concluded that a significant asset shortfall exists today. However, this issue is currently being addressed by the various services and other government agencies, so the shortfall could be eliminated by the middle to late 1990's. Many initiatives have been undertaken by the Department of Defense and by the military services. The Air Force, for example, is developing a new cargo aircraft, called the C-17, which will give much additional capability to transport large cargo, such as Army and Marine Corps main battle tanks, into small airfields

within the area of operations. Currently, there is only one aircraft that can lift large equipment--the C-5A Galaxy, which has many limitations, including cost and airfield restrictions. The C-17 will be about the same size as our medium-lift cargo aircraft, called the C-141 Starlifter, but it will have the capability to lift the same sized equipment as the C-5A, and approximately fifty percent more weight than the C-141. In addition to the acquisition of new aircraft, we have pre-positioned thirteen ships in the Indian Ocean. They are loaded with military equipment, supplies, and ammunition in order to get a significant amount of military equipment into the area quickly. Other initiatives include upgrading the Civil Reserve Air Fleet (CRAF), negotiating with nations in the area to allow us to establish United States military bases and staging areas within their countries, purchasing larger and faster cargo ships, and pre-positioning even more equipment in the Indian Ocean. All of these actions should lead, over a period of time, to a long-term solution to the shortage of strategic lift capabilities.<sup>6</sup>

The other limitation to my research effort concerns the problem of an inadequate infrastructure to support a large-scale deployment effort within the Middle Eastern region. The lack of sufficient sea and aerial ports, railroads, highways, and inland waterways in most of the countries in Southwest Asia presents tremendous planning and execution problems. These problems must be overcome by American military planners in order to allow the United States to conduct the size of force projection envisioned by its

contingency plans within the scheduled time frames. This study only addresses transportation-related problems from the ports of embarkation (origin) to ports of debarkation (initial destination). Problems concerning the onward movement of military forces from the ports of debarkation to the combat areas of operation are not addressed by this study. Although basic infrastructure problems are both significant and important, a discussion concerning the details of these problems and their solutions would require a separate research study due to the subject's complexity.

#### ASSUMPTIONS--

I have made two primary assumptions for this study. First, I have assumed that current Middle Eastern contingency plans accurately describe the scenario which would be encountered during a military deployment to the Middle East. My second assumption is that problems, which had been encountered during Southwest Asia-related Joint Readiness Exercises, would be similar to those encountered during an actual deployment to the Middle East.

The study's first assumption is that the scenarios, as described in current Middle Eastern contingency plans, accurately describe the most probable political and most realistic military threat situation which would occur during an actual deployment to the Middle East. Without actually deploying our military forces to

Southwest Asia, it is impossible to determine with one-hundred percent certainty specifically what the military and political situation in the Middle East will be. For example, our contingency plans might have to be changed significantly if United States military forces are involved in operations in another part of the world, when the decision is made that we must deploy military forces to the Middle East to protect our interests there. This could force us to make major changes in our planned force structure and thus, in our total transportation requirements and deployment time schedules. However, because the contingency plans are continuously updated to reflect the actual situation, based on intelligence information, this assumption should be considered valid.

The Joint Readiness Deployment Exercises which this study has examined are based upon current Middle Eastern and other similar contingency plans. These exercises were conducted specifically to test the adequacy of the contingency plans. Therefore, I have naturally assumed that transportation-related problems, which have been encountered during these exercises, will occur during an actual deployment to the Middle East. During the exercises military forces similar to our contingency-planned forces have deployed from their home stations to the exercise sites in a manner very similar to that which the plans envision. This study is concerned only with the movement of forces from American bases located in the United States and in Europe to the ports of debarkation (initial destination), but not with the onward movement from the ports into the area of



operations. Therefore, the problems which were encountered during the exercises should be similar to those which should be anticipated during an actual deployment. This is regardless of the fact that the exercise sites may not be located in Southwest Asia.

#### METHODOLOGY--

My research was conducted in four phases. First, I analyzed past strategic deployments conducted by the United States--to Europe (Normandy Invasion) during World War II, to Lebanon in 1958, and most recently, to Grenada--and by the United Kingdom to the Falkland Islands. I chose these specific strategic deployments because each one illustrates different types of situations in which the deployment was conducted, and they give a different perspective and manner in which major problems were dealt with or solved. These past deployments can then be analyzed and the resulting information used to anticipate the major problems which most probably will be encountered during an actual deployment to the Middle East. These analyses, reflected in Chapter Three, isolated those significant transportation-related problems, which were encountered during deployment operations. The problems were then examined to determine if they were applicable to a Middle Eastern deployment. Finally, each strategic deployment was reviewed to determine if there were any important lessons that should have been learned and, thus,

incorporated into our current contingency plans in carrying out major deployments of the future more smoothly and more effectively.

Our strategic deployment to Europe during the Normandy Invasion in World War II illustrated how well organized a mass movement of military forces and accompanying equipment can be, if there is ample time to plan the movement, gather sufficient transportation assets and properly train necessary personnel. It is nearly certain that our country shall never again have the amount of time to plan and execute an operation as we did during the Normandy Invasion. However, many of the transportation-related operational problems which had to be overcome then still apply today. Although we no longer have the luxury of extended lead times to plan large-scale military operations, we do have many advantages that planners in World War II did not have: Automation, fast sealift, large strategic lift aircraft, and designated Commands to manage and operate our transportation assets. I believe that it is important to examine the Normandy Invasion in order to see if it is possible to make similar plans and preparations today in light of the potential threat, modern technology and our increased transportation capabilities.

Our strategic projection of military forces to Lebanon in 1958 did not test the United States armed forces' ability to employ directly into combat operations after having already been deployed into a hostile combat environment. However, it did test, for the first time in recent history, America's capability to deploy

significant combat forces to the Middle East with little prior warning and with little reaction time for planning and/or execution. The Lebanon experience resulted in many lessons learned for our Southwest Asia contingency planners. Murphy's law was in full effect during the execution of the operation. Problems assumed away by planners, or ones considered to be insignificant, resulted in tremendous difficulties during the deployment phase of the operation. The Lebanon deployment was a classic example of how we do not want to conduct our strategic deployment missions of the future.

The United States' deployment to Grenada in 1983 pointed out the basic problems resulting from not using the current Army deployment/readiness/crisis action procedures as they pertain to movement of combat forces into a theater of operations. Grenada presented us with a terrific opportunity to apply lessons learned from past deployments and exercises. Unfortunately, our senior leaders elected to ignore historical experience. Although the combat operation was successful (from a small unit tactics point of view) the strategic deployment was inadequately planned and poorly executed. The Grenada experience demonstrated how successful a military operation can be, despite a poorly planned/implemented strategic deployment operation.

However, we are not the only nation that has problems conducting military deployments. The United Kingdom's movement of its combat forces to the Falkland Islands demonstrated that country's

inability to project its military power smoothly and efficiently over long distances to protect its national interests. If the war had lasted longer, it is questionable whether or not the British could have sustained the combat effort to ensure victory. The Falkland Islands deployment is significant to this study in that the deployment distance from England to the Falkland Islands is nearly the same distance as is the Middle East from the United States. Thus, many of the problems that the British encountered, which were due directly to the distance involved, should be similar to, or could be compared with, those associated with an American deployment to Southwest Asia.

The second phase of my research was conducted by examining various Joint Readiness Exercises, which have been conducted by the United States Readiness Command (REDCOM) to test our ability to execute this country's contingency plans pertaining specifically to the Middle East. These readiness exercises are pre-planned far in advance of the deployment of military forces to the exercise site. For this reason many problems concerning short-notification movements were not encountered during these exercises. However, the exercises did test the deployment of United States military forces in a scenario very similar to what one might normally anticipate in the Middle East. In addition, the exercises tested the procedures for deployment which should be used during a short-notice operation. If these procedures were to be followed during future deployments, then perhaps many of the previous problems which resulted from short planning and limited reaction times could be avoided.

Phase three of my study involved the comparison of problems which were discovered during my historical analyses with those that were encountered during Joint Readiness Exercises pertaining to the Middle East and other similar deployments. The results of these comparisons show that many of the major transportation-related deployment problems, encountered during actual deployments conducted in the past, still occurred during recent deployment exercises despite attempts at preventing recurrence.

Conclusions, speculations and recommendations for further study were made during phase four of my thesis. First, I concluded that the United States cannot successfully, strategically deploy its forces to the Middle East within the time constraints listed in current contingency plans. This conclusion was based on expected delays caused by anticipated transportation-related problems which would be encountered during a deployment to this area of Southwest Asia. Second, I speculated that future Middle Eastern deployments could be relatively successful if deployment delays could be reduced by addressing, and at least partially solving, the three major causes of these delays. These three causes were:

- 1) Lack of adequate deployment training,
- 2) Inadequate coordination, and
- 3) Failure to execute the details of the contingency plans and procedures.

The relative success of these future deployments has been determined

by the amount of adverse impact that the anticipated delays of military forces arriving into the theater of operations would eventually have on success or failure in accomplishing the military objective of the combat operation. Finally, I have made recommendations for future studies based on the conclusions and speculations of this study.

#### ENDNOTES

1 George Armand Furse, Lieutenant Colonel, British Army, MOBILIZATION AND EMBARKATION OF AN ARMY CORPS (1883): 204.

2 Ibid., p. 187.

3 Ibid., p. 197.

4 Ibid., p. 202.

5 Ibid., p. 205.

6 Deborah G. Meyer, "You Can't Be There Till You Get There," Armed Forces JOURNAL International (July 1984): 76-91.

## CHAPTER TWO

### REVIEW OF RESEARCH MATERIAL

#### CHAPTER ONE--INTRODUCTION

In order to gain an historical appreciation for deployment problems, I consulted the book MOBILISATION AND EMBARKATION OF AN ARMY CORPS, which was written by British Lieutenant Colonel George Furse in 1883. The book demonstrated great insight into how long transportation-related problems have plagued military deployments, as well as how long these problems have gone uncorrected. It goes into detail discussing deployment problems and recommending solutions to the problems. It was extremely interesting to compare these deployment problems with ones identified during the case studies of the deployments to Europe (Normandy Invasion), Lebanon, Grenada, the Falkland Islands, and to various other locations during Joint Readiness Exercises. The comparison revealed similar documentation, marking, visiting senior officer, and shiploading problems that still occur in present-day deployment operations.

The article, "You Can't Be There Till You Get There", by Deborah Meyer, which was published in the Armed Forces JOURNAL International in July, 1984, gives a good summary of the current-day strategic sealift and airlift capabilities of the United States military. In addition, the article addresses the future increase in



deployment capability and the programs planned to produce this increase.

## CHAPTER TWO--REVIEW OF RESEARCH MATERIAL

## CHAPTER THREE--HISTORICAL DEPLOYMENT EXPERIENCES

### THE NORMANDY INVASION

The primary source of information for the section on the Normandy Invasion was UNITED STATES ARMY IN WORLD WAR II--THE EUROPEAN THEATER OF OPERATIONS--LOGISTICAL SUPPORT OF THE ARMIES--VOLUME I. This book, which was printed by the Office of the Chief of Military History, Department of the Army, gave a detailed account of the planning and execution of the Normandy Invasion from a logistical perspective. An excellent supplement to this primary source was D-DAY PLUS 40 YEARS---NORMANDY INVASION, published by the U.S. Army Command and General Staff College. It gave additional details of the movement of Allied Forces from England to the coast of France during the Normandy Invasion.

### LEBANON

Detailed deployment information was found in two good sources. The first publication was entitled "NOT WAR BUT LIKE WAR": THE AMERICAN INTERVENTION IN LEBANON. The source was written by Roger J. Spiller and was published by the U.S. Army

Command and General Staff College. It provided the background to the United States' involvement in Lebanon in 1958. The second source, RAPID DEPLOYMENT LOGISTICS: LEBANON, 1958, which was written by Lieutenant Colonel Gary H. Wade, and also published by the U.S. Army Command and General Staff College, provided detailed information on the deployment problems which were encountered by American Forces while they deployed to Lebanon from Europe. Also, this source rendered a fine list of other supporting research material which covered the Lebanon conflict and deployment.

#### THE FALKLAND ISLANDS

There was much research material available covering this 1982 war between the United Kingdom and Argentina in the Falkland Islands. However, hardly any unclassified/detailed information was available regarding the deployment of British Forces from England to the Falkland Islands. Only through the assistance of the British Liaison Officer to the U.S. Command and General Staff College was a source found. This research material was the unclassified British after-action report entitled THE FALKLANDS CAMPAIGN: THE LESSONS. The report did, however, provide sufficient information to gain knowledge of those most significant deployment problems encountered by the British Forces during the operation.

## GRENADA

The source of information used in identifying the significant deployment problems encountered during the Grenada operation was the classified after-action report, well-prepared by the United States Army Training and Doctrine Command. This document, the only one that listed details of which problems were encountered during the deployment of forces from the United States to Grenada, was a helpful tool. Other available articles and publications (unclassified) on Grenada did not cover any of the significant deployment problems discussed in this study. It is unfortunate that this one invaluable document is a classified one, not only because of the difficulty of its use in this study, but because of the valuable knowledge gained from this short-notice strategic deployment. The lessons learned are virtually unavailable to many deployment planners at the small unit or installation level due to the classification of the report.

## CHAPTER FOUR--JOINT READINESS EXERCISES

Much information was gained during a visit to Headquarters, United States Readiness Command (REDCOM) at Mac Dill Air Force Base, Florida. With the assistance of the J-5 Plans Directorate personnel the Worldwide Military Command and Control System/Intercomputer Network (WWMCCS/WIN) was used in locating and printing all exercise after-action reports conducted by REDCOM during the period from 1979

through 1985. After the reports had been printed, it was necessary to manually sort the classified material from the usable, unclassified information. These reports can be obtained at any location where a WWMCCS computer terminal is located. Unfortunately, there is no such computer terminal located at Fort Leavenworth, Kansas. There were considerable shortcomings in the available material. Much of it was considered to be unusable because of the nature of its classification. While some after-action reports did not discuss the details of the difficulties which had been encountered during the subject exercise, most of the information provided via the computer system was excellent. A second source which proved to be helpful was the JOINT STAFF OFFICER'S GUIDE 1984. This handbook was published by the National Defense University, Armed Forces Staff College. It discusses the functions and interworkings of Joint Staff Organizations such as REDCOM.

#### CHAPTER FIVE--COMPARISONS

No additional research sources were used in this chapter. The comparison information was drawn from material contained in Chapters Three and Four of this study.

#### CHAPTER SIX--THE CONCLUSIONS

Current information regarding solutions to significant deployment problems was obtained through interviews conducted by the author during a visit to Headquarters, REDCOM. Personal interviews

were conducted with personnel from the Joint Deployment Agency (JDA), J-5 Plans, and J-4 Logistics. The most valuable interview was with the Army's Brigadier General John R. Piatak who was, at the time, "Director of Logistics, United States Readiness Command." General Piatak provided solid information as to which deployment problems are currently being addressed. He also provided his personal opinion as to which deployment problems he considered most significant. And although the general's personal opinions were not specifically included in this study, they did serve to verify, unofficially, the basic conclusions drawn by the author of this study.

### CHAPTER THREE

#### HISTORICAL DEPLOYMENT EXPERIENCES

##### THE NORMANDY INVASION

The Normandy Invasion, which was planned and executed by the United States and its allies during World War II, is an outstanding example of the tremendous amount of planning, coordination, and training required to successfully conduct an overseas deployment of large combat forces, even if these forces travel a short distance--across the English Channel from Great Britain to the European continent at Normandy. The invasion, which was termed "Operation OVERLORD," illustrates how a major deployment should be performed.

The British began plans for the return to the European continent in 1940 shortly after their withdrawal from France. Their planning efforts were restricted to limited operations, such as large-scale raids to divert enemy forces from Eastern Europe in an attempt to aid Russia. Plans for a major invasion against Germany could not have realistically begun until the United States entered the war in 1941. Major planning efforts began in 1942 when American and British forces held formal conferences in the United Kingdom for the purpose of examining the tactical and logistical problems associated with a cross-Channel operation. The initial concept envisioned combat

landings on a wide front between Boulogne and Le Harve in the spring of 1943.<sup>1</sup> However, after the decision was made to invade Northern Africa, the planning for OVERLORD nearly came to a halt. Although several months of intense planning time for the European invasion was lost, the lessons learned during the invasion of North Africa, which was named "TORCH," more than compensated for the lost time. Solutions to these deployment problems, which were discovered during TORCH, were included in the OVERLORD deployment plans. The two most important problems which occurred, and which were later solved after the North African invasion, were as follows:

(1) A sample cargo shipment revealed that approximately fifty-five percent of one ship's discharged supplies and equipment was either not marked or had no addressee indicated. This meant that it was not possible to separate the cargo to support TORCH from other cargoes. In an effort to quickly clear the cargo from the port, nothing was inventoried as supplies and equipment were placed in warehouses for storage. The volume was so great that several months were required in England to identify and inventory the offloaded supplies, which were intended to support TORCH. Therefore, it was deemed necessary to reorder more supplies from the United States to prepare for the American invasion of North Africa. The marking problem was solved by ensuring that all cargo be inspected for proper identification/address information at the

port of embarkation. Cargo, which had not been marked properly, was returned to the original shipper for identification.<sup>2</sup>

(2) The United States military personnel were transported to England by personnel transport ships, while their unit equipment was shipped on cargo vessels. The plan envisioned that the personnel be rapidly united with their unit equipment at the initial destination point in England. However, during the months preceding TORCH, the system did not work efficiently since equipment frequently arrived as much as eighty to one hundred and twenty days after the personnel. The system was further hampered by the marking problems. Frantic efforts had to be made to find new organizational equipment for those units, which had been identified to participate in TORCH but had not been united with their equipment. A new system was instituted to solve this uniting problem. Supplies and equipment were shipped to England without being marked for any particular unit. The deploying units would use their old equipment until embarkation and were later issued new organizational equipment upon arrival in Britain. This problem of joining arriving personnel with their equipment was addressed, and solved, in the OVERLORD plans. This was accomplished by ensuring that both the personnel, and their equipment, were transported together across the English Channel.<sup>3</sup>



Because the invasion of North Africa was top priority, it became obvious that an invasion of the European continent would not be possible in 1942. In fact, it was highly questionable whether the invasion could even be attempted a year later in 1943. Operation OVERLORD was finally planned for execution during late spring of 1944.

Detailed planning for OVERLORD began in earnest in late 1943. Operation OVERLORD was primarily a logistical operation because its purpose was to secure a lodgement on the continent from which further offensive operations could be developed. Its objective was not the defeat of the enemy in northwest Europe.<sup>4</sup> The plan's objective was to acquire or build an administrative base with all of the facilities, such as ports and depots, which were required for the staging of combat forces for offensive operations. Therefore, much of the planning was oriented toward solving transportation problems, rather than toward defeating an opposing force. The following discussions of major transportation-related planning problems and their proposed solutions led to a successful cross-Channel deployment of the Allied Forces into the continent of Europe.

PROBLEM #1:

In late January, 1944, General Eisenhower decided that the assault force would have to be strengthened by increasing its size from the three divisions that were originally planned to five divisions. Based on this decision Allied planners

estimated that there would be a shortage of two hundred and thirty-one ships and landing craft which would be required for the operation. The required additional sealift could only be acquired by a combination of three methods: (1) By reducing the quantities of vehicles transported with the assault and follow-up forces to provide lift for additional units, (2) By postponing the invasion by at least one month to allow for additional ship production, and/or (3) By requisitioning sealift assets from the Mediterranean or other sources. It was obvious that an adverse impact might possibly result during the deployment operation from the implementation of these corrective methods.

#### SOLUTION:

The execution date for the OVERLORD deployment was postponed for one month. The supporting deception plan (ANVIL) was cancelled and its programmed lift was given to OVERLORD. Cancellation of the deception plan was an accepted risk in the planning process to ensure that the main invasion of Normandy had sufficient sealift to support five divisions during the main effort of the operation.<sup>5</sup>

#### PROBLEM #2:

According to military planners the Port of Cherbourg would not be captured until about fifteen days after the initial assault

operation.<sup>6</sup> The Port of Cherbourg was the only port of any importance in the area of operations near Normandy.<sup>7</sup> It was not certain whether the Cherbourg port facilities, held by enemy forces, would be considered usable after conducting necessary combat operations to capture them. Senior leaders believed that the rate at which follow-on forces could be built up after the initial assault would be critical to the success of the amphibious operation against stiff enemy opposition. Even after the beaches had been secured and made capable of supporting over-the-shore operations, it was determined that no fully-equipped force could achieve real mobility for more than a limited period of time without a port facility from which the larger ships could discharge their cargo. Beach operations were weather-restricted and offloading could not be conducted during the fall and winter months.<sup>8</sup>

#### SOLUTIONS:

(1) The construction of an artificial harbor and two ports was planned. The concept called for the building of a breakwater, used to form a sheltered anchorage for the harbor. Floating piers, onto which ships and landing craft could offload their cargo, were also to be constructed. This synthetic breakwater was to be made from the sinking of approximately seventy-four ships, one hundred and forty-nine huge, rectangular, concrete,

cellular barges, called "Phoenixes", which were designed to function in the same manner as the sunken ships, and one hundred and thirteen floating breakwaters which were named "Bombardons." The floating piers, which were to include three types of roadway ("Whale") piers, were to extend more than three thousand feet out from the shore to about the two-fathom line. One of the piers was to have a capacity of forty tons, which could be used for offloading heavy equipment, such as tanks. The other two piers were to have a capacity of twenty-five tons each. The total port capacity complete with its twenty-three pierheads was estimated at five thousand tons of cargo and fourteen hundred vehicles per day. This was approximately the same discharge capability as that of the Port of Cherbourg. In addition to the piers, two pontoon causeways were to be constructed at the beach landing sites of the Omaha and Utah Beaches, thereby boosting the offloading facilities for smaller craft and barges.<sup>9</sup>

(2) Engineer units were assigned missions to rebuild the Port of Cherbourg and other ports, as they were captured from the enemy. Necessary construction equipment and building supplies were acquired and readied for deployment as required by the engineers.<sup>10</sup>

PROBLEM #3:

Many of the combat and support units did not have amphibious assault training. The lack of adequately-trained units was one of the most significant problems that had to be overcome for OVERLORD to have any chance of success.<sup>11</sup>

SOLUTION:

Five major exercises--known as Duck I, II, and III, Fox, and Beaver--and two dress rehearsals--Fabius I and Tiger--were planned and conducted in the United Kingdom from January through May 1944. During each exercise the problems that had been encountered were identified, documented, and addressed in subsequent exercises. These exercises trained personnel from the smallest unit level to the highest headquarters level. Coordination between these various units and their services was standardized and procedures were developed to ensure that confusion and misunderstandings were minimized. The two dress rehearsals were conducted to reflect the actual OVERLORD plan as closely as possible. The results of these exercises and rehearsals was that units understood exactly what was expected and they were truly ready to participate in the invasion. Because the last rehearsal, Tiger, was executed only one month before the actual deployment date for OVERLORD, everyone was still familiar with the operation plan which had changed very little during the previous month.<sup>12</sup>

PROBLEM #4:

The staging of the assault units and their equipment in the proper deployment sequence was extremely complex. America's initial assault and follow-up forces involved the loading of one hundred and thirty thousand men and their equipment. Another one million two hundred thousand personnel were to move across the English Channel within the first ninety days.<sup>13</sup>

SOLUTION:

Planners developed simplified procedures to stage units. The process consisted of three primary steps. First, each unit was moved from its home station in England to an assembly area near the ports of embarkation in order to reunite those units which, for one reason or another, had been split up when they initially arrived in the United Kingdom, and to replace inoperable or lost equipment and supplies. Second, the units moved to a marshaling area where they were issued rations, maps and lifebelts. They carried out final waterproofing and were organized into landing craft loads. The third and final step involved movement to embarkation points. Detailed procedures of the staging process were incorporated into the final dress rehearsals to ensure that everyone was familiar with this process, as well as the locations of the assembly areas, marshaling areas, and embarkation points. Planners

developed details for the staging plan, specifying times and locations for each unit. An organization called the Buildup Control Organization (BUCO) was established for the purpose of controlling both the movement of personnel and vehicles to the embarkation points and the movement of ships and craft between England and the coast of France. Two subordinate organizations were established as agencies tasked with the responsibility of carrying out BUCO's decisions. These agencies were the Movement Control (MOVCO) and Turn-Round Control (TURCO). MOVCO was responsible for coordinating the movement of units to the embarkation points while TURCO was to control the ships and craft. This was done in accordance with the wishes of the OVERLORD Commander who wanted these forces to land sequentially, during the assault phase of the operation. It was essential that certain types of units deploy ahead of others to prepare the beaches for follow-up and other forces.<sup>14</sup>

The final embarkation plan was issued on 20 March 1944, with only minor changes to follow in the days leading up to the deployment date.<sup>15</sup> Units began moving into their assigned marshaling and assembly areas in early May of that same year. The only major problems that occurred were due to some units not following the established procedures and directives. These units ignored the procedures, while others were unaware of sequencing changes due to security classification problems which resulted in their reporting to the

marshaling areas at the wrong time. This caused confusion and last-minute support coordination. There was no major loss of time and the movement to the embarkation areas went extremely smoothly, considering the immense size of the embarkation and staging effort. The loading of all assault elements was completed on the evening of 3 June 1944, with a planned attack date of 5 June, when moon and tidal conditions met with requirements of the landing force most satisfactorily.<sup>16</sup>

General Eisenhower decided to postpone the attack until 6 June 1944, due to weather restrictions. Some of the assault boats were enroute across the Channel when this decision was made. Recall procedures were followed and all deployed forces returned to the embarkation points or other locations until the attack was resumed. On the morning of 5 June, a force comprising nearly two thousand ships and smaller craft deployed from England to the Normandy Coast in order to be in position for the assault which began on the morning of 6 June. The voyage was uneventful with the only problems being caused by the moderate seas in transport areas, approximately twelve miles off the French Coast. The moderate seas caused difficulties in transferring personnel from the transport ships to the smaller landing craft; there was much seasickness. The seas became much rougher as the landing craft approached the beaches. The result was that at one beach (OMAHA) many craft landed in wrong positions and tanks and other vehicles were swamped. The landings at the other beach (UTAH) were conducted with contrasting ease and they went according to plans.



Only twenty-six percent of the planned supplies were discharged during the first two days because of the rough seas. The supply discharge rate steadily improved until the planned tonnages were exceeded on the fifth day. Due to communication problems, manifests and stowage plans were not made available to the personnel who were discharging ships and craft. Therefore, it was not possible to establish priorities for the offloading of cargo. Many ships arrived without the discharge personnel knowing what cargo was stowed aboard. Construction of the artificial port was begun on 7 June and proceeded as planned, until 19 June. The first pier was completed and was operational on 16 June, and it appeared that the scheduled date of completion, 24 June, could be met. However a large storm began on 19 June, and it lasted four days, nearly destroying the artificial port facility. During the storm only small quantities of supplies could be discharged and some shortages, primarily ammunition, occurred. On 23 June, the storm ended so the discharge on the beaches began again with one hundred and twenty-five percent of the scheduled tonnages being offloaded. The large, artificial port with three thousand foot piers and twenty-three pierheads was never reconstructed. Nevertheless, a smaller artificial port was constructed and it utilized the floating causeways. This port, combined with the beach operation, allowed for the offloading of seventy-one percent of the planned tonnages by the end of June. The Port of Cherbourg opened approximately one month later than scheduled due to combat forces being unable to capture it as quickly as originally planned. In addition, German sabotage had caused greater

damage to the port than the Allied planners had anticipated. Two smaller ports were captured within the first four days of the operation and they augmented the artificial port and beach discharge facilities.<sup>17</sup>

SUMMARY:

The Normandy Invasion is an extremely good example of the amount of effort which is required to conduct a successful overseas deployment operation. Planning was done in detail and was tested in several exercises, including two rehearsals, to ensure its accuracy and familiarity to the participating units. The execution was performed as closely to the actual plan as was possible, with changes being made due to enemy and unforeseen events such as the four-day storm. However, it is certain that the invasion would not have been as successful if the planning process and the unit training had not been so detailed. The only major breakdown in the execution was the destruction of the artificial port during the storm. If this port had not been destroyed it would have tremendously increased the resupply rate, as did the artificial port of the British, which was damaged during the storm but was later reconstructed.<sup>18</sup>

The Normandy Invasion illustrates the level of success that can be achieved when there is nearly an unlimited preparation time in pre-planning and training for a successful deployment operation. An American deployment to the Middle East would be quite different from the Normandy experience in that only an extremely limited planning and

training time would be available after alert notification, and the deployment distance would be nearly eight thousand miles further for a Southwest Asian deployment. Therefore, the current challenge is to be as prepared today, at all times during peacetime in terms of planning and training, as our forces were in 1944 just prior to the execution of OVERLORD.

#### ENDNOTES

1 Roland G. Ruppenthal, LOGISTICAL SUPPORT OF THE ARMIES (2 vols, 1953), 1: 175.

2 Ibid., p. 94.

3 Ibid., p. 95.

4 Ibid., p. 178.

5 Ibid., p. 185.

6 Ibid., p. 270.

7 Ibid., p. 181.

8 Ibid., p. 270.

9 Ibid., pp. 273-279.

10 Ibid., pp. 285-293.

11 Ibid., p. 335.

12 Ibid., pp. 335-354.

13 Ibid., p. 357.

14 Ibid., pp. 358-364.

15 Ibid., p. 363.

16 Ibid., pp. 370-373, 422-426.

17 Ibid., pp. 374-426.

18 Ibid., pp. 414-415.

## LEBANON

### BACKGROUND

In 1958, at the height of the Cold War, the United States intervened in Lebanon, a country whose sovereignty American leaders believed was threatened by Communist forces. This perception led President Eisenhower to order unilateral military intervention to forestall Lebanon's falling under the influence of forces hostile to United States and Western interests in the Eastern Mediterranean. The strategy of the United States during this cold war era was to prevent the spread of communism anywhere in the world where the threat existed. This general strategy directly influenced the planning and execution of this intervention, even to the point of the tactical dispositions of American troops. At a cost of more than two hundred million dollars, nearly fifteen thousand American troops from the United States and European commands were sent to Lebanon, where they remained as an urban security force for one hundred and two days. During this period one casualty was lost to hostile fire. In many respects, the American intervention in Lebanon was a model of what a unilateral, joint military intervention should be. American command around the world were affected by this operation and several contributed to it. War planning for the accomplishment of the combat mission (even though based upon several misconceptions) generally was

timely and well-thought-out. Execution of the combat operation plan, which was the responsibility of several commands, different military services, and echelons was, on the whole, solidly professional. The strategic deployment of combat forces was satisfactorily planned but hastily executed. This hasty execution resulted in confusion and a totally ineffective military movement into Lebanon. Many transportation-related operational problems were encountered and overcome. Most of these problems could have been avoided had procedures for the deployment of our combat forces been pre-established and practiced by the deploying units. After having entered Lebanon, combat commanders and troops displayed a remarkable flexibility of mind and purpose upon discovering that the local situation was considerably different from what they had originally been led to expect. For these reasons the American intervention in Lebanon stands as a useful object of study today when the United States' interests in the Middle East, in some respects, parallel those of twenty-two years ago.<sup>1</sup>

On 14 July 1958, a message was received in Washington D.C., which contained an urgent plea from President Camille Chamoun of Lebanon for the United States to deploy military forces to Lebanon to stabilize the situation there.<sup>2</sup> Our military analysts believed that Lebanon was threatened internally by strong communist-backed rebels, and externally by Syrian forces who were positioned along the Lebanese-Syrian border.<sup>3</sup> Based on this assessment, President Dwight D. Eisenhower made the decision "to move into the Middle East, and

specifically into Lebanon, to stop the trend toward chaos."4 The Joint Chiefs of Staff alerted United States forces located in Europe and the Tactical Air Command on 14 July to be ready for immediate military action in Lebanon.5 The Specified Command, Middle East (SPECOMME) was also activated that same day by the Joint Chiefs of Staff. The operation, code named BLUEBAT, envisioned a joint Marine Corps and Army effort with the Marines to begin entering Lebanon not later than 0900 hours 15 July. When the alert notice was received by the Marines at 0400 hours on 15 July they were approximately one hundred and twenty miles off the coast of Lebanon.6 The Marines were to conduct an amphibious landing to secure the ocean port and airfield facilities in Beirut. Once the port and airfield were secured, the army forces were to conduct an airborne/airland operation to begin their stabilization mission. The amphibious landing by the Marines was accomplished without encountering any major problems. The primary reason for this was that the Marines had constantly practiced amphibious landings and were trained and equipped specifically for that type of operation. The Army forces were broken down into five separate elements, named Alpha, Bravo, Charlie, Delta, and Echo, and each was to deploy from Europe. Forces Alpha and Bravo were to deploy by air from Furstenfeldbruck Airfield, West Germany; Charlie was to deploy by air from Chateauroux and Evreux Air Force Bases, France; and Delta and Echo were to deploy by sea from Bremerhaven, West Germany. (See Map 1.) A staging base in Incirlik, Turkey was used to coordinate the movement of the Army forces into the area of operations in Lebanon.7

Many problems occurred during the movements of these five Army elements, from their initial alert until they arrived at their final destination in Beirut. The major problems will be addressed in subsequent paragraphs.

PROBLEM #1:

The United States Army Europe conducted a practice alert for Forces Alpha, Bravo, and Charlie on 17 May because of the increased tensions in Lebanon. Force Alpha conducted a practice air deployment from Erding and Furstenfeldbruck airfields in West Germany. Once the practice alert was called planners realized that there were not enough personnel assigned to the task force to process the units that were scheduled to deploy by aircraft. This processing consisted of preparing aircraft manifests, checking equipment for correct preparation and serviceability for shipment, controlling movement of personnel and equipment from outlying marshaling areas to the airfield, conducting liaison communique with the Air Force, publishing the air movement schedules and ensuring that all deploying personnel were prepared for deployment (i.e. updated personnel, finance, and medical shot records, as well as planned-for care of personal property being left behind, etc.)<sup>8</sup>

SOLUTION:



Brigadier General George Speidel, 11th Division Artillery Commander, was tasked to perform the processing functions using soldiers from his unit. This force became known as "Support Force Speidel."<sup>9</sup>

IMPACT:

It was fortunate that the Army forces recognized and solved this processing problem prior to the actual alert for the deployment to Lebanon. It would have been impossible for the Army elements to meet their deployment time schedules listed in the contingency plans for the Middle East without the personnel from Support Force Speidel who were made available to perform the processing functions in support of the air movement.

PROBLEM #2:

Because the operation was classified, details could not be provided to all of the Army units. For example, the logistical units, which comprised Force Charlie, did not receive any planning guidance. Therefore, the logistical plans could not be integrated into the operational plans. In addition, working units were not able to prepare loading plans, movement schedules, or airfield departure routes for the air deployment. Delta and Echo forces did not have the

opportunity to coordinate movement or loading requirements with the port of embarkation. The non-divisional support units lacked the experience of the airborne units for rapid deployment, and these support units required extensive planning and training to become proficient. Unfortunately, the units did not receive the required planning and training due to the high security classification of the plan.<sup>10</sup> One of the general officers involved in the operation described the reason for the high classification:

"As I recall, the main reason for the extreme "need to know" imposed on us was the concern that our allies, and particularly West Germany, might find out that the U.S. planned to use forces fully committed to NATO on a distant mission. As it turned out the only concern expressed by anyone was that of German entrepreneurs who stood to lose revenues upon departure of U.S. forces. In all probability, despite our precautions, NATO knew about it all along, to say nothing of the Russians."<sup>11</sup>

SOLUTION:

After the practice alert in May the security requirements lessened and the support and other working level units subordinate to the major headquarters were able to be integrated into the operational plans. Also, they were given limited time to conduct minimum training and to prepare some loading plans. A Command Post Exercise (CPX) was also conducted in early July of the same year to accelerate the preparation process.<sup>12</sup>

IMPACT:

The lack of adequate planning and training time at the subordinate unit level caused confusion at the airfields and seaports. Many of the load plans had to be recalculated at the airfield because the actual loads did not match the plans. This situation caused an underestimation in the forecast for the number of aircraft required to transport the units to Lebanon. The resulting increase in the airlift requirement had an adverse affect on the deployment planning because the available airlift was already extremely limited. Had the security requirements not been relaxed after the May alert and some planning and training accomplished, the situation at the airfields and seaports would have been chaos instead of confusion. The incorrect aircraft forecast resulted in the deployment schedule being extended to include the additional loads that had not been originally planned.

PROBLEM #3:

The Air Force could not forecast the availability of aircraft by type for the movement. The primary cargo aircraft for the Air Force, the C-119, was being replaced by the C-130. This transition phase of the aircraft replacement caused most of the confusion as to airlift availability. As Brigadier General David W. Gray, the Army Task Force (ATF-201)

Commander, stated:

"...it was impossible for the Air Force to give us at any one time an accurate forecast of their potential lift."<sup>13</sup>

SOLUTION:

The Air Force was never able to give accurate projections of which type of aircraft would be available for the deployment of the forces to Lebanon.<sup>14</sup>

IMPACT:

The inability of the Air Force to accurately project the types of aircraft which would transport the forces during the operation compounded the load planning problems that the units were experiencing. This increased the Army's errors in forecasting the airlift requirements for its forces. In addition, not knowing what types of aircraft were available increased the confusion at the airfield.

PROBLEM #4:

The Departure Airfield Control Group (DACG), Support Force Speidel, lacked the authority to dispatch additional aircraft to meet the increased airlift requirements generated by inaccurate load plans prepared by the Army and inaccurate aircraft availability projections by the Air Force.<sup>15</sup>

SOLUTION:

This problem was never overcome during the deployment operation. Every time that the airflow schedule had to be increased beyond what was contained in the basic deployment plan, a great deal of last-minute coordination with higher headquarters was required to rectify the airlift shortfall.<sup>16</sup>

IMPACT:

The additional coordination which was required to gain approval to increase the number of aircraft flights resulted in many delays in deploying a number of units.

PROBLEM #5:

Support Force Speidel was not equipped to handle high-ranking visitors. Many senior officers arrived to view the deployment and expected to receive a briefing upon arrival. These "VIPs" were not controlled and wandered around the deployment airfield at will, asking questions and interrupting soldiers engaged in important deployment duties.<sup>17</sup>

SOLUTION:

A briefing tent was set up and a briefing officer appointed to handle the visitors. This action was only marginally

effective since only one of the many senior visitors, General Paul D. Adams, Commanding General, 7th Support Command, listened to a complete briefing. Most of the senior officers preferred to view the operation directly rather than listen to a prepared briefing.<sup>18</sup>

IMPACT:

The visitors interrupted the operation, increased the work effort of Support Force Speidel and generally added to the confusion at the airfield.

PROBLEM #6:

Support Force Speidel was unprepared to handle the press. There was no fixed policy for the accommodation of the press. For example, two unauthorized members of "Stars and Stripes" were given military transportation to the airfield to travel to the Middle East with the deploying units. They were not allowed to board any aircraft because they had travel orders issued only by "Stars and Stripes" and not by the military. It was later discovered that they should not even have been given access to the airfield. Other press members and photographers were not controlled.<sup>10</sup> General Gray remarked that "Even the Russians were at the fence taking pictures."<sup>19</sup>

SOLUTION:

Departure Airfield Control Group personnel were diverted from deployment missions to control the press.<sup>20</sup>

IMPACT:

Controlling the press required additional personnel that possibly could have been utilized better helping to deploy military units. The press, like the senior visitors, served to add to the confusion at the airfield.

PROBLEM #7:

Critical support units were not coordinated to arrive at the airfield sequentially. The riggers, who were required to support the deployment of the airborne units, took a longer route than was necessary to the airfield. Additionally, items that the riggers needed immediately upon arrival at the airfield in order for the riggers to begin their rigging for airdrop of the airborne unit's equipment were placed in the trucks that were to arrive at the airfield last. And so, the riggers were further delayed, as they had to wait until the last truck had arrived to begin the rigging process.<sup>21</sup>

SOLUTION:

The problem was not solved for the riggers due to time restraints during the deployment.

IMPACT:

The improper sequencing of the riggers to the airfield resulted in the delay of the deployment by one full day. However, the impact on the overall deployment was negligible because of several factors: The weather had delayed the C-119 aircraft, overflight rights from Austria had not been received by the Air Force, and the first scheduled task force was not prepared to depart on time.

PROBLEM #8:

In general, electronic communications did not work properly at times during the deployment. The malfunctions were primarily a result of the long communication distance between Europe and Lebanon and the security requirements for the transmission of the classified messages. After General Gray had visited Beirut, he sent a message requesting two changes in the deployment. First, "that a truck platoon be placed as top priority on Task Force Charlie and (second) that Task Force Alpha's B-bags be sent by air rather than by sea." The last half of the message was garbled and interpreted to mean that Bravo Force should advance and the B-bags were sent by sea anyway.<sup>22</sup>

SOLUTION:



Electronic communications errors were never completely solved.

IMPACT:

The early deployment of Task Force Bravo had no significant impact, because no combat operation had developed in Beirut. Thus, it did not matter that they had arrived out of sequence. Had there been a combat operation underway, the incorrect sequencing of Bravo Force into Lebanon could have been very significant. However, the only adverse result was that Alpha Force's B-bags, which contained all of their personal items such as soap, towels, shaving gear, stationery, and so forth, went by sea and were extensively damaged and looted during the voyage.<sup>23</sup>

PROBLEM #9:

Lebanese airport officials in Beirut did not provide the support they had previously agreed to. General Gray had made agreements with airport officials in Beirut for equipment storage and the use of Lebanese Army trucks. Upon the arrival of General Gray and the advance party no parking space had been reserved nor were any of the trucks available.<sup>24</sup>

SOLUTION:

The advance party solved all of the problems through

coordination with Lebanese officials just as the first group of aircraft carrying the main body appeared in the distance.25

IMPACT:

Because the problems were solved before the main body arrived in Beirut, there was no impact. If these problems had not been corrected much confusion would have resulted as the aircraft arrived with the combat troops. It would have been difficult to offload, transport and stage the incoming personnel and equipment without Lebanese support.

PROBLEM #10:

Conflicting guidance was given concerning which service was responsible for the offloading of personnel and equipment at the destination. Different service regulations gave different guidance concerning who had which air terminal responsibilities. The Air Force was responsible for airport clearance and processing of all other-than-unit cargoes, and personnel. The deploying services (Navy, Marine, Army, and Air Force) were responsible for offloading their own units under the technical supervision of the Air Force. It was very difficult to determine which aircraft contained deploying units, rather than general supplies and replacement personnel. Another gray area concerned who, specifically, was responsible for the offloading of aircraft containing units from different

services and/or other-than-unit cargo and personnel.26

SOLUTION:

A joint cargo and personnel handling organization was established which consisted of a combination of Air Force and Army combat personnel.27

IMPACT:

Until the joint organization had been established, the offloading process was confusing, disorganized, and inefficient and it had consumed more time than should have been required. Fortunately, combat troops could be diverted to assist in the airfield operations until the support forces arrived. If a combat operation had been underway it is highly questionable whether the soldiers could have been spared from their primary missions to assist at the airfield. Without the efficient clearance of the arrival airfield this deployment could have taken a considerable amount of additional time.

PROBLEM #11:

Cargo ships were administratively loaded rather than by ensuring that unit integrity of the equipment was maintained aboard the ship. Civilian stevedores at the port of Bremerhaven, West Germany, did not consider possible

offloading problems when they loaded the vessels. Equipment was loaded without regard to unit integrity. Passageways on the newly acquired Roll-On/Roll-Off vessel, the United States Naval Ship (USNS) Comet, were blocked by cargo which had been lifted into place by cranes. Cargo which had been placed into the deploying unit's cargo trucks was removed by the civilian stevedores and it was stowed in an area separate from the cargo trucks. It was combined with loose cargo from other units and was not documented on the ship's manifest as to stowage location or unit identification.<sup>28</sup>

SOLUTION:

The problem was never solved. The ships were offloaded, the cargo having been sorted and stored in the best manner possible.

IMPACT:

The cargo that blocked the passageways on the USNS Comet had to be lifted off before other vehicles could be rolled off (driven off). This caused several hours of needless delay. Unit equipment and cargo had to be identified and sorted as it was offloaded from the vessel. Had the equipment been loaded by unit integrity, this process of identifying, sorting, and staging would have been more quickly accomplished. Thus, the port clearance could have been much better organized and more

efficient.

PROBLEM #12:

Cargo manifests and other documentation for the ships were either incomplete or missing.<sup>29</sup>

SOLUTION:

The problem of inaccurate cargo manifests was not solved.

IMPACT:

Equipment and cargo had to be identified as it was offloaded. It was not possible to forecast which unit's equipment would be offloaded at what time. Therefore, units were notified later than should have been necessary to pick-up their equipment from the staging areas. This increased the port clearance time and added to the confusion. Because the manifests were inaccurate or missing, the cargo could not be identified and offloaded prior to the less critical cargo. The problems which the 229th Engineer Battalion encountered illustrate the impact of incorrect documentation quite well:

"The identification of this unit's (229th Engineer Battalion) TAT ("to accompany troops" equipment) was extremely difficult on debarkation from the (USNS) Uphur. A correction to the personnel manifest erroneously awarded a portion of this unit shipment number 74,000 DTX in addition to its correct shipment number 74,000 DMX. Consequently, half of this unit's TAT was marked DMX and the other half DTX. Shipment

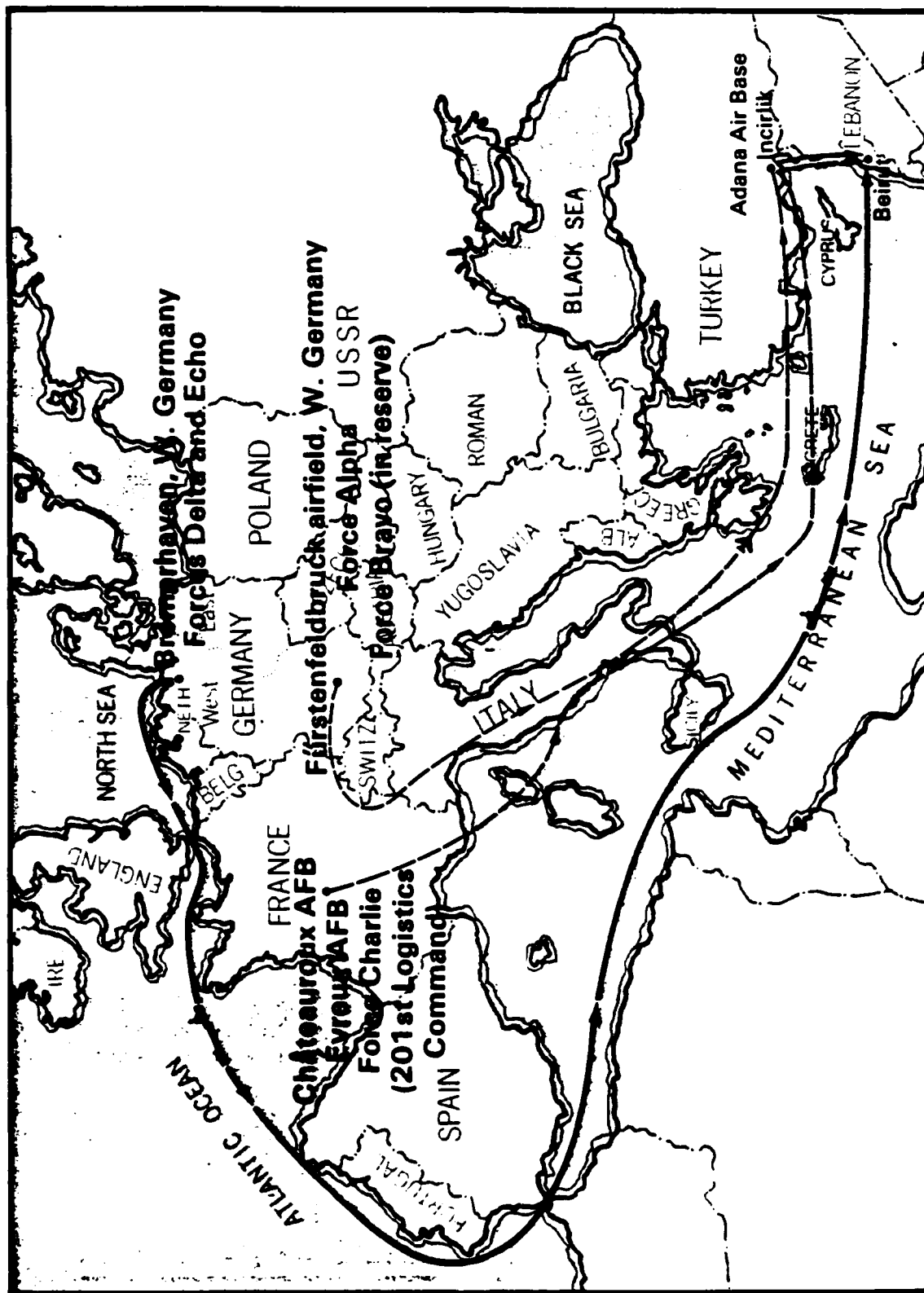
number 74,000 DTX was shared with the 79th Engineer Construction Battalion, which was also aboard the USNS Upshur. As a result, much time was spent opening all shipping boxes marked DTX to determine the rightful owner, and considerable effort was required in double handling much of this equipment. The TAT was loaded in a haphazard manner aboard the ship and was not identifiable by unit on the ship's cargo manifest."30

SUMMARY:

The military deployment to Lebanon by the United States in 1958 was a success in a broad sense of the word. That is, Operation BLUEBAT was successful as United States combat forces were deployed to the operational area in Lebanon. However, if we were to consider problems encountered during the deployment, which could have been overcome by better planning and execution, then the operation might better be termed "a limited success." General Gray summarized the results of the operation:

"No basic change had to be made in our plan, and such adjustments as were required fell entirely within its framework. On the other hand, we were not loaded and locked within the time frame we had projected and, therefore, did not achieve our objective. In sum, the plan succeeded; we failed in its execution."31

The Lebanon deployment serves to emphasize the importance of effective coordination and of the adherence to details of pre-established contingency plans and procedures relative to future deployments of American forces into this Middle Eastern region.



Source: "Infantry Conference Report," Comments, 218.

Map 1. ATF 201 Deployment Routes to Lebanon in 1958

#### ENDNOTES

1 Roger J. Spiller, "Not War But Like War": The American Intervention in Lebanon, Leavenworth Papers (January 1981): 60.

2 Ibid., p. 17.

3 Gary H. Wade, Lieutenant Colonel, United States Army, "Rapid Deployment Logistics: Lebanon, 1958," Combat Studies Institute--Research Survey No. 3 (October 1984): ix.

4 U.S. American Land Forces, Lebanon, "After Action Report, 15 July 1958 to 25 October 1958, 2d Provisional Marine Force, 24th Airborne Brigade, 201st Logistics Command," (25 October 1958): 1. Cited in Wade, "Rapid": ix.

5 Spiller, "Not War": 25.

6 Ibid., p. 18.

7 Ibid., p. 31.

8 Wade, "Rapid": 20.

9 Ibid., p. 21.

10 Ibid., pp. 21,26.

11 David W. Gray, Major General (Retired), United States Army, manuscript of his experiences in Lebanon, Combat Studies Institute, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas: 16. Cited in Wade, "Rapid": 26.

12 Wade, "Rapid": 21.

13 Gray manuscript: 12. Cited in Wade, "Rapid": 26.

14 Wade, "Rapid": 27.

15 Ibid., p. 29.

16 Ibid., p. 30.

17 Ibid., p. 30.

18 Ibid., p. 30.

19 Gray manuscript: 25. Cited in Wade, "Rapid": 30.



20 Wade, "Rapid": 30.

21 Ibid., p. 31.

22 Ibid., p. 33.

23 Ibid., p. 33.

24 Ibid., p. 34.

25 Ibid., p. 34.

26 Ibid., p. 35.

27 Ibid., p. 37.

28 Ibid., p. 38.

29 Ibid., p. 38.

30 Ibid., p. 44.

31 Gray manuscript: 28. Cited in Wade, "Rapid": 41.

## FALKLAND ISLANDS

On 2 April, 1982 Argentina invaded the British-controlled Falkland Islands. The invasion was condemned by the United Nations in its Resolution 502 which called for an immediate withdrawal of Argentinian forces and a peaceful settlement of the dispute. The British were willing to abide by the resolution and would negotiate, if Argentina were to remove her troops from the Falklands. However, Argentina refused to withdraw these forces until after a settlement had been reached with England. Three days after the invasion had begun the United Kingdom deployed forces to the Falkland Islands. This initial deployment by the British was planned, primarily, as a show of force and national resolve to encourage Argentina to withdraw her forces and to begin negotiations for a peaceful settlement of the conflict. However, Argentina did not withdraw from the Falklands and thus, the British began combat actions by landing forces at San Carlos Water on the night of 20/21 May 1982.<sup>1</sup>

British deployment was conducted by sea as there was no secure airfield on the Falkland Islands. In addition, there were no airfields that could handle the wide-body jets which would be required to deploy the British forces. Eventually over one hundred and ten ships were deployed. These included forty-five merchant marine vessels with volunteer crews. The merchant ships transported nine

thousand personnel, one hundred thousand tons of freight and ninety-five aircraft to the South Atlantic. Because the Falkland Islands lie eight thousand miles southwest of the United Kingdom and over three thousand and five hundred miles from the nearest British support base on Ascension Island, the deploying force had to be entirely self-sufficient in food, water, ammunition and all other supplies.<sup>2</sup>

The Falkland Islands deployment by the British was highly successful. Their combat forces were able to achieve victory within three and a half weeks over entrenched and well-supplied ground forces as well as over an air force that outnumbered the British six to one. However, transportation-related problems did arise and had to be overcome by British commanders and support personnel. The transportation-related problems which were encountered by the British during the deployment will be discussed in subsequent paragraphs.<sup>3</sup>

#### PROBLEM #1:

Cargo ships were not loaded in accordance with a combat employment plan. The British did not have a written contingency plan for military operations in the Falkland Islands. Due to political considerations for displaying an immediate show of force, the ships were loaded as quickly as possible and sailed before a combat operations plan was developed. After the combat employment plan had finally been

developed it became apparent that much cargo/equipment had been loaded onto a wrong ship or stowed in the wrong location aboard ships. Therefore, the ship's cargo stowage did not support the planned cargo discharge priority or sequence required for the combat assault.

#### SOLUTION:

Cargo transfer operations were conducted while moving at sea to reorganize the stowage of equipment. This action would be critical to the success of the initial assault landing and follow-up forces. Support ships transferred ammunition, equipment, fuel and other supplies on some twelve hundred occasions. In addition, more than three hundred helicopter transfers were conducted. Other transfer operations were conducted on Ascension Island.<sup>4</sup>

#### IMPACT:

Many hours/days were required to transfer and restow the cargo and equipment to support the combat employment plan. However, the impact on the operation was negligible because of the great distance--between the United Kingdom and the Falklands--and the resulting extended movement time. Nearly one month was required to traverse the eight-thousand mile distance because the ships had to move in a zigzag pattern to avoid enemy detection. The extended movement time was also

encouraged by British officials to gain time for the purpose of achieving a diplomatic solution to the Falklands crisis situation. It was fortunate for the British that this distance was so great. Otherwise, it would have been nearly impossible for them to conduct a successful assault with the equipment configured as originally loaded onto the ships. The time required to transfer the cargo and equipment could have prevented the British from employing its combat forces at the time that they would have preferred. Instead, the date of assault would have depended upon the transfer operation completion date.

#### PROBLEM #2:

The British merchant ship, the "Atlantic Conveyor," was sunk by an Argentinian Exocet missile. The ship was carrying much needed supplies as well as most of the heavylift helicopters (Chinooks) required to support deployment of combat forces from the vessels to the Falkland Islands. There was only one Chinook helicopter left in service after the Atlantic Conveyor sank. The loss of the helicopters was critical because the operations plan called for all supplies to be airlifted from the ships directly to the combat units on the Islands. The combat plan did not envision the establishment of a logistics base on the Islands due to the general lack of a transportation infrastructure and poor trafficability on the

Islands. The British wanted to support the operation logistically from an off-shore base on the ships. This action would have reduced the number of times that the supplies would have to be handled during the operation.<sup>5</sup>

#### SOLUTION:

A squadron of Sea King anti-submarine warfare (ASW) helicopters was converted from a combat role to a cargo-hauling support role. The ASW helicopters were adequate for the support role. However, because they did not have the cargo-carrying capacity of the Chinooks, many more of them were required to replace the lost Chinooks.

#### IMPACT:

The use of the Sea King helicopters in a logistical support role dramatically reduced the anti-submarine warfare capability of the British combat forces. This situation could have been avoided if the British had not loaded most of their heavylift helicopters onto a single ship.

#### SUMMARY

Two lessons learned from the Falklands deployment can be applied to an American deployment to the Middle East. First, the British expended a great amount of effort in ensuring that the cargo

ships had been loaded in a manner that would support the employment of their combat forces into the Falkland Islands. Current United States Middle Eastern deployment plans do not include provisions for the loading cargo vessels by priority of discharge or even by maintaining unit integrity of equipment and supplies wherever possible. Secondly, the loading of all or most of a critical type of equipment, such as heavylift helicopters, onto a single vessel jeopardized the success of the combat mission when the ship was sunk by an enemy missile. Again, American deployment plans do not identify critical types of equipment which might be better transported on separate ships to reduce the risk of losing all or most of one particular capability during a combat mission.

#### ENDNOTES

1 British Secretary of State for Defence, The Falklands Campaign: The Lessons (December 1982): 5,6.

2 Ibid., p. 6.

3 Ibid., p. 6.

4 Ibid., p. 6.

5 Ibid., p. 9.



## CHAPTER FOUR

### JOINT READINESS EXERCISES

The Joint Readiness Exercises which this chapter examines have been conducted during the years of 1979 through 1985. These specific exercises were chosen in order to use them in analyzing current-day deployment problems. The purpose of conducting these "Joint Chiefs of Staff (JCS) directed or coordinated" exercises was to test various operations plans (OPLANS) for contingencies in different locations around the world. The OPLANS were developed by major Joint Commands using the Joint Operation Planning System (JOPS). JOPS is a Department of Defense directed, Joint Chiefs of Staff specified system designed to accomplish global and regional joint operational planning. As such, JOPS establishes the processes to be implemented in both deliberate and time-sensitive planning of joint operations. It is oriented toward the solution of complex mobility problems associated with force deployment and support. Thus, the focus of JOPS is strategic deployment planning, from port of embarkation (POE) to port of debarkation (POD).<sup>1</sup> Analyses of these exercises serve to identify transportation-related problems, which would most probably occur during deployment of combat forces to any of the regions of the world for which the OPLANS were written. Further, many of these problems would be common to any deployment, regardless of origin or destination

of the deployment. Therefore, this chapter will not only examine specific exercises which were conducted to test Middle Eastern contingency plans, but in addition, it will examine other exercises and inherent problems, including those which could possibly occur during a deployment to Southwest Asia. This examination of additional Joint Readiness Exercises focuses on a larger sample size of deployments for a more detailed, in-depth analysis.

The Readiness Command (REDCOM) conducted these JCS-directed or JCS-coordinated Joint Readiness Exercises. Each exercise tested a certain OPLAN and was given a specific code name. Some of these code-named exercises were conducted more than one time over a period of several years. This study examines the Readiness Command after-action reports for thirteen different code-named exercises, which had been conducted on twenty-two different occasions. These examined exercises appear below with their formal names and the years in which they were conducted:

<u>EXERCISE NAME</u>	<u>YEAR CONDUCTED</u>
1. Autumn Forge	1983
2. Bold Eagle	1980, 1982, 1984, 1985
3. Brave Shield	1979, 1980
4. Bright Star	1981, 1982
5. Brim Frost	1981, 1983, 1985
6. Display Determination	1984
7. Empire Glacier	1978, 1980

8. Gallant Eagle	1979, 1982
9. Gallant Knight	1982, 1983
10. Jack Frost (renamed Brim Frost)	1979
11. Positive Leap	1980
12. Reforger	1985
13. Team Spirit	1984

The Autumn Forge, Reforger, and Display Determination Exercises tested the OPLANS that had been written for European/North Atlantic Treaty Organization (NATO) contingencies. Participating military units deployed from the United States to locations in Europe via strategic airlift and sealift.

The Bold Eagle Exercises were conducted at Eglin Air Force Base, Florida and had tested OPLANS for deployment to the Middle East. Military units were transported to the exercise site by military convoy, railroad, tactical and strategic airlift, and strategic sealift. Also, this exercise had been used to test the military's ability to discharge ships off-shore and to move the cargo onto shore via landing craft. (This method for unloading a vessel is termed "Logistics Over the Shore" (LOTS)).

Additionally, Middle Eastern OPLANS also were tested during the Brave Shield, Bright Star, Gallant Eagle, and Gallant Knight series of exercises. Of these four exercises, Brave Shield, Gallant Eagle, and Gallant Knight were conducted within the boundaries of the United States. The participating units arrived at the exercise area via rail, air, highway, and sea modes of transportation. However, the

fourth exercise, Bright Star, was conducted in the Middle East, primarily in Egypt. Bright Star participants were generally transported by strategic airlift and sealift into the exercise sites.

OPLANS which had been written for contingency missions in Alaska and other northern areas were tested by the Jack Frost (renamed Brim Frost in 1981) and Empire Glacier Joint Readiness Exercises. Tactical and strategic airlift, strategic sealift, military convoy, and railroad transportation were utilized to move units to the exercise areas in the states of Alaska and New York.

The Positive Leap Exercise was conducted in the United States. Its purpose was to test Rapid Deployment Force contingencies in areas other than the Middle East.

All of these Joint Readiness Exercises were pre-planned, involving several months of preparation and coordination prior to the start of each exercise. Therefore, problems caused by short-notice contingencies were not found in any of the after-action reports. Also, there were other problems which were not addressed in this study, since the material is classified. However, examinations of these exercises resulted in identifying many unclassified transportation-related problems which were encountered during the deployments that possibly could occur during an actual deployment to the Middle East. The major problems are listed by two classifications: 1.) Airlift, and 2.) Sealift. Each major problem will be explained at length during the following written discussions.

## AIRLIFT

### PROBLEM #1:

During the Autumn Forge 83 exercise a 40K loader had been deployed from Rhein Main AFB, Germany to the Brussels International Airport, Belgium to assist in the off-load of cargo from the U.S. Air Force C-141 cargo aircraft which were to arrive at this aerial port of debarkation (APOD). This 40K loader is an essential piece of equipment which is used to off-load Air Force pallets from the cargo aircraft. The 40K loader, which had been sent to Brussels, was inoperable when transported from Germany. In addition, no fuel for the 40K loader was immediately available because the fuel requirements had not been previously identified.

### IMPACT:

The inoperable 40K loader resulted in the unsafe off-loading of a thirteen-ton computer van. Two Air Force pallets were damaged, while the first aircraft had required an excessive amount of time to off-load its cargo (two hours).<sup>2</sup>

### PROBLEM #2:

During the airlift deployment of Exercise Bright Star 81, the C-141B model (stretched) cargo aircraft had been introduced into the airflow sequencing at random and without notification of aerial port of embarkation (APOE) personnel. The C-141B model aircraft is equipped to carry fifty percent more cargo

than the C-141A model. The airfield control group was anticipating the arrival of only the smaller type (C-141A) aircraft.

IMPACT:

Because the APOE personnel had not been made aware of the time when the C-141B aircraft were going to be arriving, all of the aircraft loads had been built for "A" model loads. Thus, much carrying capacity of the C-141B aircraft was wasted.<sup>3</sup>

PROBLEM #3:

Shortfalls in deployment sequencing of units during Exercise Bright Star 82 had caused troops to bivouac in the open without tentage while they waited for their equipment to be conveyed from the port of Alexandria, Egypt to the aerial port of debarkation at Cairo West Airport, Egypt.

IMPACT:

The obvious lack of a planned sequencing of units into the exercise sites had been manifested as the deployment and offloading of equipment progressed. In some cases there was little order in which the troops and equipment had arrived. One ship, the CYGNUS, arrived at the Port of Alexandria on schedule; the drivers arrived via airlift on schedule. But the time to offload the ship and marshal and convoy the equipment had not been accounted for, resulting in

approximately three hundred and sixty troops waiting for thirty-six hours without tentage, eating facilities, or unit equipment.<sup>4</sup>

PROBLEM #4:

The 24th Infantry Division Departure Airfield Control Group's (DACG) limited experience and lack of timely interface with the Air Force's Airlift Control Element (ALCE) had initially precluded the smooth and rapid deployment of the Division during Bright Star 82.

IMPACT:

When the decision had been made by the 24th Infantry Division not to use the established installation transportation office departure airfield control group (DACG), the original interface between the DACG and the Air Force's airlift control element (ALCE) was diluted. Instead of using the established DACG, a new DACG had been formed to provide additional unit deployment training. The new DACG had been composed of personnel with no previous aircraft loading experience. Time for training and coordination had not been available, because the decision to use a new DACG had been made too late in the deployment planning process. Coordination between the DACG and the ALCE had not been made until the first day of the deployment. The DACG's lack of training and coordination severely limited the efficiency and speed of loading the aircraft. For example,

the first aircraft was a wide-body commercial aircraft which had three cargo compartments and three personnel entrances. Instead of efficiently using all of the aircraft's personnel and cargo loading ports simultaneously, only one cargo compartment and one passenger entrance was used at a time. This inefficient use of the aircraft's cargo loading ports had resulted in the aircraft being delayed three hours. The same loading process had been used on subsequent aircraft, causing similar but shorter delays. These delays became shorter as the DACG developed greater proficiency in assisting the ALCE in loading the aircraft.<sup>5</sup>

PROBLEM #5:

Army airload plans had to be changed at the last moment at Pope Air Force Base, North Carolina during the air deployment of XVIII Airborne Corps units to the Middle East during Bright Star 82. The Air Force did not inform the Army deploying units of a new fifteen thousand pound per C-141B cargo aircraft weight reduction for aircraft loads. In addition, some arriving aircraft had personnel already on board who had not been anticipated by the Air Force. Further, some arriving aircraft had been short sufficient tie-down chains for planned loads.

IMPACT:

The changing of the Army's aircraft load plans had caused



confusion at the airfield, as well as an inaccurate estimate of the Army's airlift requirements by approximately eighteen percent. Also, the shortages of tie-down chains had to be made up from the Pope Air Force Base contingency stocks.<sup>6</sup>

PROBLEM #6:

Security classification guidance of the Bright Star 82 deployment operation at Pope Air Force Base had been unclear regarding what was still considered to be classified, following the Joint Chiefs of Staff announcement of exercise details to the press. Classification of the deployment activities had remained in force throughout the air deployment from Pope Air Force Base. However, heavy press coverage of deployment events, coupled with no command guidance change regarding the classification, had created uncertainty at the worker level concerning Operational Security (OPSEC).

IMPACT:

The lack of guidance as to classification of the deployment caused confusion at the airfield and had hampered deployment coordination efforts. Much of the coordination could have been performed more quickly and efficiently in an unclassified mode.<sup>7</sup>

PROBLEM #7:

Cargo documentation problems hampered the deployment operation at origin (Pope Air Force Base, North Carolina) and at

destination (Cairo West Airport, Egypt). All Air Force resupply cargo had been documented as transportation priority-one regardless of the type or need for the cargo. Cargo had been marked with the Unit Identification Code (UIC) rather than full unit name and location. Some cargo pallets had been made with mixed unit cargoes, without regard to the destination locations of the different units.

IMPACT:

The DACG at Pope Air Force Base had been forced to unilaterally prioritize all Air Force resupply cargo, as all of the cargo could not have been transported priority-one due to limited aircraft and other high priority Army cargo. This resulted in the shipping of some cargo in a higher/lower transportation priority than was actually required. More time than should have been necessary had been required to sort unit cargo at destination, because unit names and locations had not been marked on the cargo. The mixed-unit cargo pallets resulted in these pallets being torn down by the eleven-man Arrival Airfield Control Group (AACG). Thus, rapid cargo delivery to recipients was not accomplished.<sup>8</sup>

PROBLEM #8:

During Exercise Gallant Eagle 79 Army units had not provided the Air Force forecasts for accurate airlift requirements to be used for their deployment to the exercise site.

IMPACT:

The Army units had underutilized the carrying capacity of many of their aircraft loads (forty percent of six missions) because they had desired to maintain unit integrity rather than maximize the cargo capacity of their aircraft. The problem could have been corrected by either the DACG or ALCE if the units had not waited until their arrival at the airfield to finalize their aircraft load plans. The inaccurate airlift forecast resulted in more aircraft loads having been used than should have been necessary to deploy the forces. This meant that more time to load and configure the cargo, in addition to more aircraft, was required for the deployment of the Army forces.<sup>9</sup>

PROBLEM #9:

The 9th Infantry Division did not fully utilize its aircraft during the Brave Shield 17 deployment. Because of this utilization problem the Division did not accurately forecast its airlift requirement for the deployment.

IMPACT:

Eighteen C-130 cargo aircraft were required to deploy the Division to the exercise site. If the units had properly load planned their deployment aircraft needs, only fourteen C-130 aircraft would have been required to airlift the Army units.

The extra aircraft loads resulted in the need for more loading and transportation time than should have been necessary for the deployment of the Division's forces.<sup>10</sup>

PROBLEM #10:

The Air Force did not provide its airfield personnel with the projected aircraft arrival/departure times for deployment of the Brave Shield 17 participating units.

IMPACT:

The airfield control personnel were not able to properly coordinate aircraft support elements for the loading of deploying units because the Air Force had not provided an accurate projection of aircraft arrival/departure times. The support functions by Army parachute riggers, Air Force Combat Control Teams, and firefighters had been degraded since they could not plan on approximate times for which to have their assets available. The lack of projected arrival/departure times had led to a misuse of support elements and created confusion at the airfield.<sup>11</sup>

PROBLEM #11:

The Air Force changed planned aircraft mission numbers due to weather delays during the Empire Glacier 78 deployment.

IMPACT:

When the Air Force chose to change aircraft mission numbers

because of weather delays much confusion resulted at the deployment airfields. The confusion arose when the airfield control units experienced difficulty in matching planned aircraft loads with the new aircraft mission numbers. In some instances, units were not notified of their aircraft loading time until two hours prior to the scheduled aircraft departure time.<sup>12</sup>

PROBLEM #12:

A Special Forces unit made a last-minute load plan change without notifying airfield control unit personnel during Jack Frost 79.

IMPACT:

The Special Forces unit's equipment aircraft load had been inspected at the unit's marshaling area and was found to be satisfactory. However, when the unit arrived at the airfield the load had been changed and would not fit on one aircraft. Therefore, one of the Special Forces' detachments was delayed twenty-five hours before it could be deployed into the exercise site.<sup>13</sup>

PROBLEM #13:

Proper equipment had not been available to expeditiously load Army helicopters onto Air Force C-5A cargo aircraft during the deployment for Brim Frost 81 from Travis Air Force Base, California. Properly constructed auxiliary loading ramps and

single ground-handling wheels, which are normally required to load helicopters into C-5A aircraft, were not available at the origin airfield.

IMPACT:

Excessive loading time was required when auxiliary loading ramps had to be fabricated at the airfield. Additional loading time was required as the helicopters had to be winched into the aircraft and then moved into position on plywood runners because the proper ground-handling wheels were not available.14

PROBLEM #14:

During Brim Frost 81 twenty-five loads that had been delivered to Elmendorf Air Force Base, Alaska had been improperly prepared. Aircraft pallets had to be rebuilt, vehicles down-loaded, and documentation corrected before the cargo could be accepted for air shipment. Vehicles were overweight because the units had loaded them with last-minute unexpected supplies. The pallets had contained hazardous material, such as gasoline and ammunition, which had not been documented and had been mixed in with standard cargo.

IMPACT:

Delays in aircraft departures of up to three hours per aircraft were experienced. In some cases aircrews exceeded

their crew duty time while awaiting loads, and had to be replaced with new crews, thus, wasting valuable crew flying time.15

### SEALIFT

#### PROBLEM #1:

During the Gallant Eagle 82 sea deployment of XVIII Airborne Corps elements from the Port of Wilmington, North Carolina, visiting senior officers disrupted the loading operation of the Roll-On/Roll-Off (RO/RO) ship, the "Comet".

#### IMPACT:

The visiting General Officers at the Port of Wilmington, North Carolina, had disrupted the ship's loading operation by interrupting the personnel involved directly in loading cargo aboard the "SS Comet," and by asking questions which could have been answered by VIP escort officers. Also, these senior officers disrupted operations by giving guidance on how the ship could better be loaded. Some of the guidance was incorrect, and did not follow good ship-loading techniques. For example, one suggestion had been to stack military jeeps to more fully utilize the cubic foot carrying capacity of the vessel. This suggestion could not have been followed, because it would not have been possible to drive-off the jeeps from the RO/RO vessel at the destination port. In addition, these

tours of the port and ship operation had prevented key port operations personnel from performing their normal duties. The ships loading operation was delayed by approximately one half of a day due to these visiting senior officers.16

PROBLEM #2:

The type of ship scheduled to transport XVIII Airborne Corps units was changed at the last minute for Gallant Eagle 82 by the Military Sealift Command. Originally, a Sea Train type of vessel (the SS Sea Train Ohio) had been scheduled to be the first vessel loaded at the Port of Wilmington, North Carolina. The Sea Train Ohio was to have been followed by a Roll-On/Roll-Off (drive-on/drive-off) vessel (SS Comet). Due to ship scheduling problems, the two ships were switched in the sequence that they were to arrive at the port. The Sea Train vessel originally had been scheduled first because of its large cargo compartments (holds). These large holds had been required to facilitate large pieces of support equipment, such as communications shelters, maintenance vehicles, and helicopters, that would be required to arrive at the destination port first in order to provide support for the later-arriving combat units. Originally it had been planned that the RO/RO vessel was to have been loaded after the Sea Train ship, because of all of the small-wheeled vehicles of the combat units, which could have been easily driven-on and driven-off the vessel. The RO/RO ship, Comet, arrived at the



port first. Much of the cargo for the support units had to be reconfigured to fit in the lower cargo holds of the vessel, which had had severe cargo height restrictions. Communications and maintenance shelters had to be removed from the cargo beds of the trucks, and were lifted onto the ship and stowed in locations on ship away from the trucks. There had been an insufficient quantity of small vehicles available to fill the lower cargo holds of the ship. Therefore, larger, more hard-to-handle vehicles had been driven into position in the lower holds. For instance, the height restriction in the lower hold was eighty-three inches. The smallest vehicles available to load in the lower holds were two-and-one-half-ton capacity trucks, which measured eighty-one inches from the top of the steering wheels (highest point on the reduced-for-shipment trucks) to the ground. As can be imagined, the trucks which did not have power steering required much positioning time, since each one had to be backed into its stowage location to facilitate rapid offload. The second ship to be loaded for the exercise was the Sea Train Ohio. All cargo for this type of ship had to be lifted up onto the vessel. The combat unit equipment consisted of relatively small vehicles, mostly jeeps, which used only a small portion of each cargo hold. This meant that more lifting and positioning time was required to load the large quantity of small vehicles onto the ship, as each vehicle had

to be lifted and positioned separately. Also, the cubic foot cargo capacity (volume) of the vessel was underutilized, since the short, small-volume vehicles had been stowed into the approximately fifteen-foot high, large-volume cargo holds of the Sea Train ship.

IMPACT:

This switching of the sequence of arrival of the two vessels resulted in an increased loading time of approximately two full days. Because the equipment which had been loaded onto the RO/RO vessel had to be reconfigured, much sorting time was required at the destination port to unite communications and maintenance shelters with their appropriate trucks.<sup>17</sup>

PROBLEM #3:

During the deployment of Bright Star 82, forces documentation had not accurately reflected the actual configuration of the 24th Infantry Division vehicles which had been loaded aboard the Roll-On/Roll-Off ship, "Cygnus," at Savannah, Georgia. In an effort to maximize the full cubic foot carrying capacity of the vessel, some jeeps had been loaded in the cargo beds of five-ton cargo trucks; one-quarter-ton trailers had been loaded on top of armored personnel carriers. However, the documentation for the cargo had not been changed to reflect the new cargo configuration.

IMPACT:

Several hours of extra sorting time were required at the destination Port of Alexandria, Egypt to account for the vehicles once they had been offloaded.18

PROBLEM #4:

During the off-shore discharge operation of Exercise Bold Eagle 86 (conducted in October 1985) several landing craft were damaged as they were being off-loaded from the ship. Navy and Army landing craft had been loaded aboard the United States Naval Ship (USNS) "Capella" to support the ship's off-shore discharge operation near the exercise site at Eglin Air Force Base, Florida. Damage had been done to two of the three landing craft's control and operating consoles, as they were being lifted off the vessel and into the water. The damage had been caused because the craft had been lowered with its starboard side (right side) toward the hull of the ship, and the sea's wave motions rolled the craft against the ship and thus, caused damage to the exposed control console. Similar damage to the Army's air-cushioned landing craft had been narrowly avoided. The USNS Capella should have had a fendering (bumper) system on board to ensure that damage could not have occurred to the large landing craft.

IMPACT:

Fortunately, the damaged craft were repaired fairly quickly and

did not hamper the off-load of the ship. However, if the landing craft had been severely damaged, it would not have been possible to discharge the vessel off-shore.<sup>19</sup>

PROBLEM #5:

The landing craft used in the off-shore discharge operation of the USNS Capella during Bold Eagle 86 was visible from the ship's deck when the fore (front) and aft (rear) cargo holds of the ship were being off-loaded. The fore and aft sections of the ship's hull had an extreme curvature. Thus, the wave motion of the sea pushed the craft under the curvature and out of the view of the cargo handlers on the deck of the ship. If the Capella had used a fendering system, then the craft would not have disappeared under the curvature of the hull.

IMPACT:

The inability of the cargo handlers to see the craft from the deck of the vessel caused the off-loading of the fore and aft cargo to be much slower than should have been necessary.<sup>20</sup>

PROBLEM #6:

Cargo documentation/manifests had not been used for sealift cargo during Exercise Bold Eagle 86. Standard documentation and manifesting procedures had not been used at the port of embarkation at Galveston, Texas. The ship had arrived at the off-shore discharge location near Eglin Air Force Base, Florida without documentation.

IMPACT:

Much time was wasted in the marshaling areas near Eglin Air Force Base, while sorting cargo. Accountability had been impossible to maintain, making it difficult to ensure that military units had received all of their equipment.<sup>21</sup>

PROBLEM #7:

Ships transporting Reforger 85 cargo had been administratively loaded without regard to unit integrity.

IMPACT:

Much additional time was required to sort and prepare equipment for onward movement in the marshaling areas. Had unit integrity been maintained during shiploading, the marshaling area could have been cleared of cargo more quickly, as units could have picked up their equipment in the sequence in which it had been off-loaded from the ship. Instead, units had to wait until the entire ship had been discharged to recover their equipment, because the equipment had been loaded in different locations on board the ship. Thus, it was off-loaded in increments, rather than as a single group.<sup>22</sup>

SUMMARY

Problems which were encountered during the pre-planned Joint Readiness Exercises as examined in this chapter, most probably would

occur, as well during an actual deployment to the Middle East. In fact, because an actual deployment would likely involve a comparatively short notification time, more problems of the same type that were caused by inadequate coordination should be expected in an actual deployment versus a readiness exercise.

## ENDNOTES

1 Armed Forces Staff College, Joint Staff Officer's Guide (July 1984): 5-3.

2 U.S. Readiness Command, After-Action Report--Autumn Forge 83: Ref. 74, F-18.

3 U.S. Readiness Command, After-Action Report--Bright Star 81: Ref. 6, II-7.

4 U.S. Readiness Command, After-Action Report--Bright Star 82: Ref. 14, III-5.

5 Ibid., Ref. 2, III-1.

6 Ibid., Ref. 6, III-3.

7 Ibid., Ref. 7, III-3.

8 Ibid., Ref. 21, III-8.

9 U.S. Readiness Command, After-Action Report--Gallant Eagle 79: Ref. 3, II-10.

10 U.S. Readiness Command, After-Action Report--Brave Shield 17: Ref. 1, II-8.

11 Ibid., Ref. 1, II-33.

12 U.S. Readiness Command, After-Action Report--Empire Glacier 78: Ref. 4, II-9.

13 U.S. Readiness Command, After-Action Report--Jack Frost 79: Ref. 2, II-29.

14 U.S. Readiness Command, After-Action Report--Brim Frost 81: Ref. 2, II-4.

15 Ibid., Ref. 3, II-21.

16 Stephen B. Howard, Captain, United States Army, Port of Wilmington, North Carolina Operations Officer, Observation of Gallant Eagle 82 Sea Deployment (Mar 1982).

17 Ibid.

18 U.S. Readiness Command, After-Action Report--Bright Star 82: Ref. 3, III-2.

19 U.S. Readiness Command, After-Action Report--Bold Eagle 86:  
II-C-2.

20 Ibid., II-C-4.

21 Ibid., II-C-7.

22 U.S. Readiness Command, After-Action Reoport--Reforger 85:  
Ref. II, C-8.



## CHAPTER FIVE

### COMPARISONS

Comparisons of transportation-related problems which had been encountered during various actual and Joint Readiness Exercise deployments (airlift and sealift) are discussed in this study. These formal comparisons are summarized in figures one and two in the following pages of this chapter.

In viewing column one of this summary, one can see that each of the problems which had been identified in this study has been classified into general "type" problems. Also, in column two each actual deployment or readiness exercise in which this type of problem had occurred is then listed. Column three indicates the most probable cause of the problem itself. Having established a reason for this problem, the potential impact (measured in anticipated/estimated days of delay) is listed in column four. These estimated days of delay were derived both from deployments which have been previously examined in this study, as well as from the author's ten years of deployment experience.

Problems which were encountered during the Grenada deployment have been omitted from these summaries (Figures 1 and 2) due to their security classification. The comparison information, however, for Grenada is available in the classified section of this chapter.

These summaries are important because they clearly show that basic transportation-related problems which have occurred in the past still continue today to plague both actual and Joint Readiness Exercise strategic deployments. During previous deployments, such as the Normandy Invasion, military planners had the luxury of long periods of time to address and to correct anticipated problems before the actual deployment began. Although problems did occur during the deployment due to unforeseeable events such as the storm of 19 June 1944 it is still questionable whether the Normandy Invasion would have been successful had the problems--documentation, training, sequencing, and inadequate ports of debarkation--not been identified and corrected prior to "D-Day." While the Normandy Invasion serves to illustrate how successful a deployment can be given ample lead time and effective strategic planning, the Grenada Invasion illustrates the myriad of problems that can, and do, occur in today's extremely time-restricted strategic military deployments.

There was a total of seventeen deployments used for comparisons in this chapter of the study. The following pages discuss the comparison summaries illustrated by figures one and two which are located at the end of this chapter. Figure one deals with airlift problems; Figure two is concerned with sealift difficulties.

#### EXPLANATION OF AIRLIFT PROBLEMS (FIGURE 1)

##### TYPE PROBLEM #1

Four of the examined deployments in this study indicate that untrained and inefficient airfield control groups had caused significant confusion and delays. The most probable reason for a poor performance by control groups is an obvious lack of sufficient training. This lack of training is easy to identify, though difficult to correct. Arrival/departure airfield control groups (A/DACGs), particularly those of the Army Branch, only have the opportunity to train during actual or exercise deployments; other training or readiness activities occupy their time when there is no on-going deployment. Considering the limited funding for these expensive deployment exercises and the fact that A/DACG operations are normally a unit's secondary mission, as the use of the artillery group during the Lebanon deployment demonstrated, it is not difficult to understand why airfield control groups do not receive this much-needed, adequate training. Of course, the result of this lack of training is a state of confusion compounded by delays at the airfield due to inefficiency and poor prior planning for such items as on-load and off-load equipment. The resulting delays caused by these inadequately trained control groups normally should not be expected to exceed two days, depending on the size of the deployment effort. The reason this estimated delay is a relatively short one, is because the airfield control group's functions are fairly simple and they can be mastered by an

untrained unit within a one-to-two-day time frame.

#### TYPE PROBLEM #2

Operations Security (OPSEC) and classification problems were significant factors in three of the studied deployments. The difficulty with too much security is that it limits the ability for deployment planners to make the proper coordination that would ensure a smooth deployment operation. Coordination must be accomplished by all commands levels--from the unified headquarters, such as REDCOM or CENTCOM, all the way down to the company-level units. The lack of access to classified deployment information and secure communications equipment makes it nearly impossible to adequately coordinate any relatively complex deployment operation. Considering the brief deployment "window" of approximately one to five days at most airfields, an estimated impact was between one and two days of delay.

#### TYPE PROBLEM #3

Airlift forecasting problems have been present in five of the examined deployments. Although the Air Force has extensively automated subsequent aircraft scheduling and its management, available aircraft forecasting is still a problem. These problems still exist because the aircraft management operation is very complicated. Forecasting is not a major problem for civilian aircraft management. This is because civilian

airlines operate daily over regularly scheduled routes. Thus, it is not as difficult a task to keep track of all of their commercial aircraft. In addition, civilian airlines normally buy only one or two different types of aircraft with similar capabilities. The Air Force, on the other hand, usually does not operate its aircraft on any specific schedule, routes, or to/from specific airfields during deployment operations. Additional problems include the requirement to operate various models and types of aircraft, reduced peacetime crew manning levels, aircraft mechanical breakdowns and conflicting airlift mission priorities. Consequently, it is extremely difficult to forecast aircraft availability by specific type of aircraft more than twenty-four hours in advance of a major deployment operation. However, under "normal" circumstances, military forecasting and its related problems should not delay an operation more than a maximum of one or two days.

#### TYPE PROBLEM #4

The airlift deployment problems caused by visiting senior officers and other VIPs have been documented only in reference to Lebanon. However, during numerous other deployments it is almost certain that many undocumented cases did occur. This conclusion is based upon the author's personal experience supervising airlift control groups at Fort Hood, Texas, from 1979 through 1981 and from 1984 through 1985. Visiting senior

officers detracted from the airlift deployment mission, at least to a small extent, in each of the more than fifteen deployments. The impact of the visiting officers has not been recorded in after-action reports for obvious reasons, as comments might have reflected adversely on these senior officers. Lost work effort does not only result in the usual loss of production time during briefings and tours, but much time is consumed in preparation for these visits and in answering follow-up questions for the VIPs after they have left the airfield. The establishment of control procedures for visiting senior officers may not necessarily solve problems, as was evident during the Lebanon deployment, because these visitors ignored the visitor control and briefing procedures anyway, wandering around the deployment airfield at will. Problems perpetrated by visiting VIPs are definitely a hindrance to the timely accomplishment of any deployment mission. However, the total anticipated delay time would not be more than one day. Nevertheless, one day of delay may be significant to the success of the deployment operation.

#### TYPE PROBLEM #5

The proper sequencing of units to the airfield is critical because it is in this sequence that the combat forces will arrive into the operations area at the deployment destination. The sequencing of the support forces into the area of

operations is of particular importance. A minimum number of the support forces must precede their combat units into the area of operations in order to receive and process these combat forces at the ports of debarkation. If the support units are not available to process combat units, then the off-load of passengers and equipment by untrained personnel at the destination airfields would be relatively slow. Delays could be expected to be from one to two days.

#### TYPE PROBLEM #6

The conflicting airfield control responsibilities experienced during the Lebanon deployment were primarily interservice conflicts resulting from a lack of regulations and procedures to address joint service operations. The resulting delays and confusion, when added to the problem of untrained airfield control groups both from the Army and Air Force, would be considered significant. Interservice conflicts such as these probably would not delay a deployment for more than one day.

#### TYPE PROBLEM #7

Documentation errors would not normally cause a delay at the embarkation airfield, since all errors that would impact on flight safety, such as hazardous cargo documentation, would be corrected at this airfield. However, documentation and marking errors could cause delays of one to two days at the destination, if the cargo's owner is not clearly or correctly

identified.

#### TYPE PROBLEM #8

In at least four of the studied deployments inaccurate Army airload plans caused problems. One of the significant problems caused by incorrect load plans is aircraft safety, especially when the planning error is related to weight or hazardous cargo. Another major problem is the time element whereby expected delays of one or two days could occur, if initial plans for airlift are less than the actual requirements and if they are unrealistically requested. Conversely, if more aircraft are requested than is really required, critical airlift capability becomes an effortless waste.

#### EXPLANATION OF SEALIFT PROBLEMS (FIGURE 2)

##### TYPE PROBLEM #1

As with airlift, documentation and marking inaccuracies created sorting problems during a number of the sea deployments. This kind of problem tends to have a greater impact on a sea versus an air deployment because of the large quantity of cargo that an ocean vessel carries. While the largest United States Air Force aircraft carries approximately one hundred tons of cargo, a ship normally hauls from about



eight thousand to fifteen thousand tons of supplies and equipment.

#### TYPE PROBLEM #2

Current-day deployment procedures provide for personnel to be airlifted into the theater of operations while the majority of their supplies and equipment are transported by sealift. Problems concerning the unloading of personnel and their equipment caused by poor sequencing of the deploying units occurred in the American reception areas in England prior to the execution of the Normandy Invasion, as well as during the Lebanon deployment. The sequencing of personnel into the debarkation area must be planned to coincide with the equipment offload date at the port. This ensures that the port is cleared of its cargo just as soon as it is discharged from the ships and that military members do not have to wait for their equipment to be off-loaded.

#### TYPE PROBLEM #3

During the Normandy Invasion there were no available seaports for the off-load of the ships carrying personnel and equipment. Although artificial ports were constructed, many of the ships were discharged off-shore. Off-shore discharge of cargo is slower than fixed port discharge operations. The anticipated delay for a cargo ship being discharged off-shore would be from two to five days depending on weather conditions

and the experience level of the longshoremen off-loading the cargo. These types of delays should be expected to occur in a Middle Eastern deployment considering the limited number of adequate port facilities in the planned area of operations.

#### TYPE PROBLEM #4

Sealift deployment training for Army combat and support units was difficult to conduct prior to embarkation. The reason for this difficulty was due to two training problems. The first problem was that units had conflicting training priorities; most combat unit commanders felt that combat training was much more important to the success of the overall operation than was shiploading and discharge training. The second problem was that most units had not had adequate facilities available to conduct sealift training. These units had been located far from any seaport and therefore, could not have conducted any realistic shiploading and stowage training. The potential impact of this lack of training could have been from one to five or more days of delay time, depending upon the size of the force being deployed, the type of vessel being loaded, and the type of equipment being shipped.

#### TYPE PROBLEM #5

The administrative loading of ships could possibly have delayed a deployment from one to four days. When ships are loaded administratively, they are loaded without consideration

for maintaining unit integrity of cargo and equipment. Thus, when the ship is offloaded at the destination port additional time is required to sort the cargo and equipment by unit, prior to the unit picking up its cargo at the port marshaling area. The result is that units cannot be efficiently sequenced into the port marshaling area as the ship is being discharged, because it is not possible to forecast exactly when during the discharge operation a unit's equipment will be off-loaded. For example, ninety-five percent of a unit's equipment may be off-loaded during the first day of the ship discharge operation and the remaining five percent off-loaded on the fifth day of the operation. If the ship had been loaded tactically while maintaining unit integrity of cargo and equipment the availability of the unit's equipment for pickup at destination port could have been predicted with accuracy. Consequently, units could have been efficiently sequenced into port marshaling areas for equipment pickup.

#### TYPE PROBLEM #6

For the same reasons as previously explained in the airlift comparison discussion (Airlift Explanation-- Type Problem #4), visiting senior officers and VIPs can unnecessarily delay a sealift deployment by as much as two days.

#### TYPE PROBLEM #7

Changes in the type of ship scheduled for deployment, as seen

in the Gallant Eagle 82 deployment, or changes in the priority for equipment discharge, as seen in the Falklands deployment, can result in major delays from one to ten or more days. Normally, the length of a delay would have been based on the simple fact that there is always time involved in having to reconfigure, to transfer and/or to restow equipment. Also, this length of delay would have been directly affected by factors such as the limitations of discharge priority restrictions and by requirements or standards while using a different (unfamiliar) type of ship.

#### SUMMARY

Various deployments encountered many different problems which, in turn, adversely affected deployment operations. Each of these problems existed as a result of a specific cause, as was discussed in this study's Chapter Three, Chapter Four, and in this chapter. All of the cited causes can be grouped into three general categories of causation. The first category reflects a lack of adequate deployment training. The second category indicates inadequate coordination. And the third, and final, category shows a failure to execute the details of the contingency plans and procedures. Each of these categories of cause will be discussed along with its Middle Eastern implications later in Chapter Six, under Conclusion.

# AIRLIFT PROBLEMS

TYPE PROBLEM	ACTUAL/ EXERCISE DEPLOYMENTS	PROBABLE CAUSES	POTENTIAL IMPACT (DELAY IN DAYS)
1. Untrained/inadequate airfield control groups/ off/onload equipment	Lebanon/ Bright Star 82/Brim Frost 81/Autumn Forge 83	Lack of training/ Forecasting of loading equipment/ Poor coordination	1 to 2
2. Operation classified/ limited coordination	Lebanon/ Bright Star 82	Security too strict at worker/ coordinating level	1 to 2
3. Airlift forecast not available/inaccurate	Lebanon/ Bright Star 81/Bright Star 82/ Brave Shield 17/Empire Glacier 78	Air Force aircraft control/Tracking procedures inadequate/ Poor coordination	1 to 2
4. Senior officer/VIP/ Press control	Lebanon	Control procedures not planned/Poor coordination	1
5. Units not sequenced to the airfield properly	Lebanon/ Bright Star 81	Sequencing not planned/ Poor coordination	1
6. Conflicting airfield control responsibilities	Lebanon	Responsibilities not fixed prior to deploy- ment/ Poor coordination	1
7. Documentation errors	Bright Star 82/Brim Frost 81	Documentation procedures not followed/ignored	1
8. Army airload plans inaccurate	Gallant Eagle 79/Brave Shield 17/ Jack Frost 79/ Brim Frost 81	Proper airload planning procedures not followed	1 to 2 (+)

FIGURE 1

### SEALIFT PROBLEMS

TYPE PROBLEM	ACTUAL/ EXERCISE DEPLOYMENTS	PROBABLE CAUSES	POTENTIAL IMPACT (DELAY IN DAYS)
1. Documentation/cargo marking/sorting	Normandy/ Lebanon/ Bright Star 82/Bold Eagle 86	Procedures not established/ followed/Poor coordination	1 to 10 (+)
2. Personnel/equipment not properly sequenced into debarkation area	Normandy/ Lebanon	Sequencing not adequately planned/ Poor coordination	1 to 5 (+)
3. Inadequate port for discharge	Normandy	No adequate ports in the planned debarkation area	2 to 5
4. Personnel not trained for sea deployment	Normandy/ Lebanon/ Bold Eagle 86	Training not conducted	1 to 5 (+)
5. Ships administratively loaded--did not consider discharge priorities	Lebanon/ Falklands/ Reforger 85	Ship's stowage planner did not consider the discharge priority of cargo/ Poor coordination	1 to 2
6. Senior officers/VIPs caused confusion/delays	Lebanon/ Gallant Eagle 82	Visiting officers/VIPs were not controlled/Poor coordination	1 to 2
7. Ship change/priority for off-load change	Falklands/ Gallant Eagle 82	Unforeseen changes/ Poor coordination	1 to 10 (+)

FIGURE 2

## CHAPTER SIX

### THE CONCLUSION

The success of a combat mission conducted within the Southwest Asian region is not necessarily dependent upon the success or failure of a strategic deployment operation. Delays due to transportation-related problems may not mean that the deployment operation was unsuccessful unless these delays prevented the accomplishment of the military combat operation. Military planners for Middle Eastern contingencies have determined what is required for military success on the Middle Eastern battlefields against our most likely enemy. This is determined, for the most part, by the overall combat force structure, the unit arrival times, and the arrival sequence of these forces into the combat area of operations. Although specific deployment dates for certain units are considered classified, unit deployment dates generally begin within the first twenty-four hours after the initial deployment alert notification and end approximately sixty days later. Specifically, the first airlift of personnel and equipment begins within the first twenty-four hours; the first sealift begins after about ten days following alert notification. While a first ship departing from the United States would arrive at a destination port approximately thirty days after deployment notification, vessels arriving from locations in the Indian

Ocean, known as the Near Term Prepositioned Force (NTPF) ships, would be available for off-loading in the region only approximately five days after the alert.<sup>1</sup> According to planners, this timely and planned sequencing of units is critical to the success of the combat mission because the United States does not have any permanent combat ground forces located anywhere within the region. Thus, planners conclude, the units must arrive at nearly the exact times and in the specific sequence planned in order to successfully conduct the battle just as the contingency plans envision. Any delay of more than one day, in theory, would most likely result in a failure to achieve the combat mission. Consequently, the standards by which a deployment must be measured are based specifically upon the time schedules contained within Middle Eastern contingency plans. Therefore, the definition of total success as it applies to strategic deployment to the Middle East is the ability of United States military forces to deploy combat units in the exact manner and within the time schedules listed in these contingency plans. However, in reality it is doubtful that minor deviations from the planned time schedules would result in the total failure of the combat mission. It is more likely that each increment of delay would have a like increment of decrease in the probability for success of the combat mission. Thus, the success of strategic deployments should be judged in terms of relative success as discussed in the speculations section of this chapter, rather than in terms of total success as determined by absolute adherence to the pre-planned time schedules.



The conclusions of this study specifically address a Middle Eastern deployment scenario. However, most of the findings, future implications, speculations, and recommendations would apply to time and resource-constrained contingency plans in any area of the world.

#### FINDINGS

While carefully reviewing case studies of relatively recent short-notice deployments, the author determined that there is an indication that a similar short-notice deployment of American forces to the Middle East would probably result in unexpected delays in the deployment effort. Examples of these short-notice deployments are seen in United States military deployments to Lebanon, as well as to Grenada and by the United Kingdom to the Falkland Islands as discussed in Chapter Three of this study. Chapter Four of this study illustrates deployment delay problems via a closer examination of certain Joint Readiness Exercises, some of which have been specifically based upon Middle Eastern contingency plans. One may conclude that many of the common deployment delay problems, as identified earlier in Chapter Three, still occur in current-day deployment exercises. These problems continue to appear in present-day exercises despite the relatively long unit-alert notification time of several months prior to the actual deployment date. Therefore, the final conclusion must be that a deployment today by the United States to the Middle East would not be a total

success. This is because delays would be encountered which would, in turn, prevent the combat forces from deploying into the area of operations in the exact sequence, and within the deployment time schedule, required by America's Middle Eastern contingency plans. Consequently, any current-day deployment to Southwest Asia could only be considered a relative success as described and discussed in the speculations section of this chapter.

#### FUTURE IMPLICATIONS

It is nearly certain that all transportation-related problems will never be completely solved. However, it is obvious that at least the major deployment problems be addressed and, at the minimum, be partially solved to ensure that delays encountered during the deployment effort do not result in the failure of the combat forces in accomplishing their warfighting mission in Southwest Asia.

Specific deployment problems are currently being addressed by the responsible commands. For example, the United States Readiness Command (REDCOM) and Forces Command (FORSCOM) are looking at modern ways in which to solve documentation and manifesting errors via an automation system similar to the one used by modern grocery markets. (Food items are managed and "checked out" with computer sensors identifying markings along the sides of packages.) The military system, code named LOGMARS, would use computer sensors to identify cargo and equipment as it is placed on ships and aircraft while producing accurate documentation and manifesting products.<sup>2</sup> Both

REDCOM and FORSCOM continue to train units in deployment operations through Joint Readiness Exercises each year. Army units are reducing airload planning errors now that a special airload planning computer developed by the Air Force is being used during deployment operations.<sup>3</sup> Also, the Military Traffic Management Command (MTMC) is automating the load planning of Military Sealift Command (MSC) cargo ships to improve accuracy and maximize the cargo-carrying capability of each vessel.<sup>4</sup> Unfortunately, MTMC refuses, at this point, to address problems related to the great need to maintain unit integrity of equipment and supplies on board the cargo ships.<sup>5</sup> It is not difficult to see that this negative effect can be solved in some cases simply by an application of good planning via conscious forethought and some good common sense. At the national level the Joint Chiefs of Staff (JCS) have recently created an agency tasked to centrally control and monitor deployments in the future. This organization, the Joint Deployment Agency (JDA), will perform movement control functions similar to those that were performed by the Buildup Control Organization (BUCO) in preparation for the Normandy Invasion as discussed in Chapter Three of this study. The JDA is developing an automated deployment planning and execution system (Joint Deployment System (JDS)) which will be a functional part of the JCS Joint Operation Planning and Execution System (JOPES). JOPES will be an improved version of the Joint Operation Planning System discussed in Chapter Four of this study.

Each of these efforts implemented by the various commands in

order to solve specific transportation-related problems increases the probability of relative success of a deployment operation. However, it appears that no specific command headquarters is addressing, or is assigned to specifically address, the general problems of coordination and execution of the details of deployment plans and procedures at the deploying unit, aerial/seaport of embarkation (A/SPOE) and aerial/seaport of debarkation (A/SPOD) levels.

#### SPECULATIONS

As discussed in Chapter Five of this study, deployment delays are the result of three primary interrelated causes: 1) Inadequate training, 2) poor coordination between deploying units or agencies, and 3) the failure of units at all command levels to adhere to established deployment plans and procedures. Realistically, these basic causes will probably never be completely solved with all delays eliminated. However, a partial solution to these causes could result in the occurrence of only minor deployment delays. Thus, the deployment effort could be a relative success, depending on the amount of adverse impact that the delay has had on the overall success/failure of the accomplishment of the military objective. The relative success of a deployment operation could be expressed mathematically as follows:

$$RS = TR \times CR \times PL$$

Where: RS=Relative Success

TR=Training Level

CR=Amount of Coordination Conducted

PL=Degree of Adherence to Plans/Procedures

That is, Relative Success is equal to the Training Level compounded by Coordination and then again by Adherence to Plans/Procedures.

As the preceding formula indicates, chances for the relative success of a deployment will increase if any of the related areas of Training, Coordination, or Adherence to Plans and Procedures are increased.

The ability to increase the chances for deployment success depends upon the United States military's ability and willingness to increase the levels of the three related areas. On a daily basis, the military commands continue to attempt to increase the deployment training level of all appropriate units, since readiness is a primary objective of the military in peacetime. However, the other two related areas, Coordination and Adherence to Plans and Procedures, are not being addressed in any realistic manner. (In fact, "it appears almost incredible" that, with the many strategic deployments in which we have already engaged, very little improvements have been made in these two areas in the one-hundred-year period between British Lieutenant Colonel Furse's observations in 1883 and the Grenada deployment in 1983). Each of these two operational concepts is discussed below.

#### COORDINATION

The inability to conduct deployment coordination is principally due to a lack of quality time caused by short deployment notification within execution time constraints. The problems resulting from time constraints are compounded by security classification difficulties, as identified in the Lebanon and other short-notice deployments, discussed in Chapter Three of this study. Deployment coordination is being conducted at all levels within the command structure of the Army as well as between the various services and among Transportation Operating Agencies (TOAs). The higher headquarters elements are able to conduct coordination through secure communication equipment and computer links. However, at the deploying unit level such equipment is not readily available and coordination is very limited. At this deploying unit level coordination problems do exist, causing deployment delays to occur as reflected in Chapters Three and Four of this study. It appears that security classification efforts, evidenced in both the Lebanon and Exercise Bright Star 82 deployments, result only in the keeping of this vital, much-needed information from our deploying units and not, as expected, from such outside agencies as the news media and foreign governments.

#### ADHERENCE TO PLANS AND PROCEDURES

The inability for deploying units to follow details of deployment plans and procedures is, most likely, because these units are simply unaware of these procedural details in the contingency plans. The reason that these units are unaware of plans and procedures is that the Army and Joint Commands are structured in such

a manner that the elements which develop deployment plans are not directly involved during the actual execution of the deployment operation. In the Army, at Division level and above, and in the Joint Commands, contingency planning functions are separated from operation/execution functions. For example, in Joint Commands the J-5 directorate is responsible for planning the contingency operations, while the J-3 directorate is responsible for executing these contingency operations.<sup>6</sup> The unfortunate result is that the personnel most familiar with a contingency plan and its detailed procedures, which are required to successfully execute the operation, are not involved during the actual execution of the operation. The impact of this separation of responsibilities is not as adverse at the Joint Command Level as it is at the Army Corps and Division Levels. This is because the higher level Joint Commands are primarily involved with maintaining and analyzing the plans during peacetime. The Army Corps and Division staffs divide the planning and execution responsibilities into sub-areas such as G-3 Plans and G-3 Operations staff sections. This impact is more adverse at the Army Corps and Division Levels primarily because the operations-related staff sections are so immersed in the day-to-day training and mission accomplishment functions that they have little, or no, daily contact with the contingency planning sections. Conversely, the contingency planning sections are not involved in the daily command and control functions of the Divisions or Corps. The result is that the section possessing the execution responsibilities has little, or no, knowledge of the

details involved in the contingency plans, or of the procedures required to successfully execute these plans. This situation is truly a tragic one, considering the tremendous amount of time and effort that planners have had to expend while developing the contingency plans and considering the expertise that is simply wasted by not having these contingency planners present while executing the plans which they, themselves, have produced and with which they are most familiar.

It is obvious that if the United States is to project enough combat forces into the Middle Eastern region to protect its national interests there, it is critical that the deployment effort be well-coordinated and the contingency plans and movement procedures followed.

#### RECOMMENDATIONS FOR FUTURE STUDIES

##### RECOMMENDATION #1

That a formal study be conducted to explore a variety of methods for a reduction in deployment problems caused by inadequate coordination resulting from security classification restrictions.

##### RECOMMENDATION #2

That a formal study be conducted for the definitive purpose of identifying better, more organized command structures within the Army



at the Division and Corps levels, in order to ensure a smoother execution of deployment contingency operations.

RECOMMENDATION #3

That a formal study be conducted to identify and solve those specific transportation-related problems at the deploying unit and A/SPOE and A/SPOD level which can realistically be solved and which currently cause the largest deployment delays.

#### ENDNOTES

1 Deborah G. Meyer, "You Can't Be There Till You Get There." Armed Forces JOURNAL International (July 1984): 76-77.

2 Interview, Brigadier General John R. Piatak, U.S. Army, 19 February 1986. U.S. Readiness Command, Director of Logistics, Mac Dill Air Force Base, Florida.

3 Ibid.

4 Ibid.

5 U.S. Readiness Command, After-Action Report--Reforger 85: Ref. 11, C-8.

6 Armed Forces Staff College, Joint Staff Officer's Guide (July 1984): 2-29.

# BIBLIOGRAPHY

## BIBLIOGRAPHY

### 1. Interviews

U.S. Army Command and General Staff College, Fort Leavenworth, Kansas.

#### Interview

Major Scott Bergeron

Major William E. Mc Elroy

U.S. Readiness Command, Mac Dill Air Force Base, Florida.

#### Interviews

Lieutenant Colonel James Fennigan

Brigadier General John R. Piatak

### 2. Newspapers and Magazines

Cordesman, Anthony H. "The Falklands Crisis: Emerging Lessons for Power Projection and Force Planning." Armed Forces JOURNAL International, (30 September, 1982).

Iungerich, Raphael "U.S. Rapid Deployment Forces--USCENTCOM (U.S. Central Command)--What is it? Can it do the job?" Armed Forces JOURNAL International, (October, 1984).

Jackson, Michael G. and Stewart W. Timmerman "Analyzing Deployment Effectiveness." Army Logistition, (March-April, 1985).

Kenney, Major Robert F. "Sealift Deployment for Gallant Eagle 84." Translog, (January, 1985).

Magnuson, Ed "D-Day in Grenada," Time, (November 7, 1983).

McGeoch, Ian "The Falklands Operation: Problems, Considerations, Lessons," NATO's Fifteen Nations, (July, 1982).

Meyer, Deborah G. "You Can't Be there Till You Get There," Armed Forces JOURNAL International, (July, 1984).

Philpott, Tom "Grenada Airlift: Troops, Students," Air Force Times, (7 November, 1983).

"Special Report: Grenada and Lebanon," Newsweek, (November 7, 1983).

Stack, Sgt. Cecil "Grenada," Soldiers, (January, 1984)

Wettern, Desmond " 'STUFF' (Ships Taken From the Trade) in the Falklands Crisis," Pacific Defense Report, (October, 1982).

### 3. Government Publications

#### "Middle Eastern and Other Related Joint Readiness Exercise After-Action Reports."

Autumn Forge 1983  
Bold Eagle 1980, 82, 84, 85  
Brave Shield 1979, 80  
Bright Star 1981, 82  
Brim Frost 1981, 83, 85  
Display Determination 1984  
Empire Glacier 1978, 80  
Gallant Eagle 1979, 81  
Gallant Knight 1982, 83  
Jack Frost 1979  
Positive Leap 1980  
Reforger 1985  
Team Spirit 1984

"Great Britain, Ministry of Defence." The Falklands Campaign, the Lessons. 1982.

"Leavenworth Papers," "Not War But Like War": The American Intervention in Lebanon. 1981.

"Combat Studies Institute: Research Survey No. 3." Rapid Deployment Logistics: Lebanon 1958. 1984.

Classified after-action reports--Operation URGENT FURY 1983.

### 4. Books

Baker, Chauncey B., Major. Transportation of Troops and Materiel. Kansas City, Missouri: Franklin Hudson Publishing Company, 1905.

Beakey, Dan J. Logistics Over the Shore: Do We Need It? Washington, D.C.: National Defense University Press, 1982.

Charles, Roland W. Troopships of World War II. Washington, D.C.: Army Transportation Association, 1947.

Daniel, Marshall E. Defense Transportation Organization: Strategic Mobility in Changing Times. Washington: National Defense University, Research Directorate, 1979.

Frost, John. 2 Para Falklands: The Battalion at War. London: Buchan and Enright, 1983.

Furse, George Armand, Lt. Col. Mobilisation and Embarkation of an

- Army Corps. London: W. Clowes and sons, limited, 1883.
- O'Shaughnessy, Hugh. Grenada: Revolution, Invasion and Aftermath.  
London: Sphere Books, 1984.
- Perkins, Stuart L. Global Demands, Limited Forces: U.S. Army  
Deployment. Washington, D.C.: National Defense University  
Press, 1984.
- Sowell, Lewis C. Base Development and the Rapid Deployment Force: A  
Window to the Future. Washington, D.C.: National Defense  
University Press, 1982.
- Villar, Roger. Merchant Ships at War: The Falklands Experience.  
Annapolis, Maryland: Naval Institute Press, 1984.
- Watson, Bruce W. and Peter M. Dunn, editors. Military Lessons of  
the Falkland Islands War: Views from the United States.  
Boulder, Colorado: Westview Press; London, England: Arms and  
Armour Press, 1984.

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Major (P) Theodore M. Shadid  
DJCO  
USACGSC  
Fort Leavenworth, Kansas 66027-6900

Lieutenant Colonel William Fritchley  
DSRO  
USACGSC  
Fort Leavenworth, Kansas 66027-6900